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QUEENSLAND.

REPORT OF THE REGISTRAR-GENERAL ON THE RETURNS OF AGRICULTURE AND LIVE STOCK FOR THE YEAR 1896.

Presented to both Houses of Parliament by Command.

TO THE HONOURABLE THE HOME SECRETARY.

SIR,—I have the honour to submit, for your information, my usual Report on statistics relating to agricultural and pastoral pursuits for the year 1896. The preparation of the section relating to the first-named branch of the subject at least has afforded opportunity for more satisfactory deductions than was the case last year; but the extremely dry weather which obtained over a large portion of Queensland during the greater part of 1896 was very prejudicial to the interests of those engaged in depasturing live stock, and the result is shown by an appreciable decline in the numbers of all kinds of stock in the colony at the end of last year.

COLLECTION OF STATISTICS.

The collection of the schedules relating to agriculture and the manufacturing industries devolves upon the police, and, with but few exceptions, is carried out in a most painstaking and intelligent manner; but the absence of expert collectors, who would be qualified by experience to estimate the areas to be devoted to each kind of crop, and to form conclusions as to the probable results in anticipation of the harvest, makes it hardly possible, with much prospect of success, to do more than obtain records of facts respecting the crops after they have been garnered.

The improvement which was so pronounced last year in connection with the collection of the returns of the number of live stock under "*The Stock Returns Act of 1893*" was not continued this year. Owners did not, in a number of instances, make their returns except under extreme pressure; and the consequent work thrown upon the clerks of petty sessions and upon the officers of my Department was very great. Every opportunity which offered was taken advantage of, both to initiate the public into the requirements of the law upon this point and to give facilities to them for obtaining the forms. The necessity for making these returns was notified through the Advertising Board in the public Press throughout the colony; and head teachers of many State schools were supplied with forms, and, with the permission of the Minister for Public Instruction, they were requested to make known to the children, and through them to their parents, that they were required to furnish returns. In addition to this, the police also issued the schedules when collecting the agricultural statistics, and impressed upon the owners of stock the necessity of making the return under penalty, but the efforts made had not the desired result.

I think it is probable that the fact that there was no collection this year under the Meat and Dairy Act may have caused some misconception on the part of the public as to the need for making these returns; and this is the more excusable when even some clerks of petty sessions were led into the same error, in spite of the issue of copies of the Stock Returns Act, accompanied by full explanations and instructions. In connection with this subject I may mention that it is extremely difficult to impress upon some of the clerks of petty sessions the necessity for punctuality in obtaining returns of stock. The Statistical Department is compelled by statute to have the list of live-stock owners supplied to rabbit boards and marsupial boards in time for their elections, which means by the 1st of May in each year. Compiling these lists and having them printed necessarily take some time after the schedules come to my hands. It is therefore impossible to have them issued punctually unless the clerks of petty sessions take the necessary steps to have all the schedules collected which are due from their district by the end of February at the latest; but some of these officers overlook their duties in this respect to such an extent that it is quite usual to receive letters from them in the middle of May, saying they are then about to cause proceedings to be taken against defaulting owners—a step which should be taken at least two months earlier than they consider expedient.

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DECREASE IN LIVE STOCK.

The following table shows the number of each kind of live stock depastured in the colony at the end of each of the last two years:—

A.

Year.	Horses.	Horned Cattle.	Sheep.	Pigs.
1895	468,743	6,822,401	19,856,959	100,747
1896	452,207	6,507,377	19,593,696	97,434
Numerical Decrease in 1896 ...	16,536	315,024	263,263	3,313
Centesimal Decrease in 1896 ...	3·53	4·63	1·33	3·29

The decrease in horses, amounting to 16,536, is not a matter of great moment, as the supply is fully equal to the needs of the colony, and the prospects of outside markets in which to dispose of any surplus at a remunerative rate are not very promising. A few are still shipped to India, but the demand there appears to be limited, and the conditions very stringent; and although good prices can sometimes be realised for first-class animals, the charges for freight, &c., absorb a large proportion of the profit. Moreover, the demand does not appear to be sufficient to justify the employment of suitable and properly fitted ships; consequently the losses on unsuitable vessels now employed are frequently heavy. Recently the action of the Imperial War Office authorities in moving to obtain 10,000 horses, for remounts, from Argentina in South America was availed of to try and obtain a share of the business for Australia; but it does not seem probable that, with a voyage of from three to four times the length, much prospect of successful competition really offers. More recent reports, however, would appear to make the matter of a share in this trade more hopeful for Australia, because so remote is the prospect of suitable remounts being obtained from Argentina that only 5 per cent. of all horses inspected there were found at all up to the standard of animal required. Fully one-fourth of the decrease in horses may be accounted for by the excess of exports over imports; for whereas only 1,216 horses were brought into the colony 5,695 were sent away. The decrease in cattle and sheep is of much greater moment, as it directly affects the chief productive industry of the colony; and yet, in view of the prolonged period of dry weather which was experienced, especially in the South-western portions of the colony, the losses have hardly proved so severe as was generally expected. Cattle suffered more than sheep, both actually and relatively, particularly in the Warrego district, which bore the brunt of the drought, and which is chiefly devoted to this class of live stock.

The ratios of increase or decrease in each kind of live stock, for each of the past ten years, are given in the following table:—

B.

Year.	Horses.	Cattle.	Sheep.	Pigs.
1887	9·75	9·88	33·39	19·08
1888	6·04	4·05	4·01	— 6·34
1889	8·61	4·67	7·64	17·01
1890	3·82	14·08	24·44	19·95
1891	9·20	11·42	12·67	26·67
1892	5·86	6·44	6·99	— 4·68
1893	1·65	1·54	— 13·87	— 41·77
1894	3·35	4·78	4·76	31·71
1895	5·55	— 2·72	1·37	12·34
1896	— 3·53	— 4·63	— 1·33	— 3·29

— Decrease.

From this table it is seen that horses have increased each year of the decade, except in 1896; in cattle there has been a decline in numbers during each of the past two years. In 1893 the decrease in sheep was very great, amounting to nearly one-seventh of the whole number; whilst last year the ratio of the decline was almost the same as the increase in the preceding year, leaving the number in the colony at the end of 1896 about the same as at the end of 1894.

It is to be feared that the present year will at its close leave even a less satisfactory record, as the result of a severe and continued drought and ticks combined. These visitations, which proved sufficiently disastrous during 1896, are still afflicting the colony, and at the time of writing with little or no sign of abatement.

The worst effects of the drought are experienced in the interior, in the Western portions of the colony. The owners of cattle or sheep for the most part continue, as in the past, dependent on the natural herbage, and, although greatly assisted by the artesian water now available, still find themselves unable in seasons like the past and the present to provide any means of sustenance for their flocks and herds, except the insufficient method sometimes adopted of cutting down certain kinds of scrub trees in order that the cattle or sheep may feed on the leaves; and they are fortunate if means of communication are available to some meat-works or boiling-down establishment, by which at least to lessen their loss. To the sheepmaster, the marked improvement in the price of wool during 1896 was some compensation; but the very poor prices until lately obtained for frozen meat afforded no relief in that direction to the grazier whose property consisted of cattle.

With the experience acquired in the past, it is a matter for regret that so many stockowners continue to rely upon the natural herbage alone. With the water now proved to be available, a sufficient quantity of forage might be grown or saved from the natural grasses in good seasons to further lessen the losses which are so severely felt in adverse seasons.

The ticks, which had for some time been working a great deal of mischief in the Carpentaria districts at the latter end of 1895, spread rapidly to the East and South-east, and in the more humid climate of the Northern portion of the eastern seaboard appeared to develop with alarming rapidity. Disastrous as the effects were when the visitation was confined to areas in the interior, where cattle were kept solely for breeding and fattening purposes, and serious to the individual owner as the losses were

in many cases, yet there was some compensation in the rising value of the beasts, which resulted from their decreasing numbers; but when the coastal districts were attacked, where the cattle to a great extent consisted of dairy herds, the proprietors' means of livelihood were at once taken away, and the rise in the value of cattle in the interior only aggravated the trouble to the dairy farmer in that he was compelled to pay a higher price for animals to restock his farm. It would appear, moreover, that when a herd is attacked with ticks the mortality is diminished the less they are disturbed, so that the malady is much worse amongst the dairy herd, which of necessity is continuously interfered with, than in ordinary cases. Thus for the present this plague is likely to administer a severe check to the dairying industry in the tick-infested districts. If the scientific experiments now being carried on should have the effect of rendering cattle immune from tick-fever, and that it will pay to replace dairy herds in the North-eastern districts by more carefully selected and higher-grade animals, the visitation may not prove to be an unmixed evil.

At first relief from the scourge of ticks was sought for by means of dips and unguent dressing, but, although this treatment generally resulted in the destruction of the insects, it did not cure the disease created by their bites nor protect the cattle from subsequent attacks; moreover, in many instances the beasts were adversely affected by the dressing used. Recent inquiry has developed along the line of inoculation, and experiments still progressing offer the hope of a satisfactory solution in this direction.

The anxiety attendant upon this trouble in the North-eastern districts, and the exertions required to combat it, would appear for the time to have drawn attention to a considerable extent from the trouble affecting Queensland in the South-west or the other end of the colony. There the drought has caused, and is likely to further cause, considerable loss of stock; but the affected districts have happily some compensation in so far as that the drought retarded the incursion of rabbits, which in themselves are considered a trouble little short of a prolonged drought. Under the legislation of recent years, fences have been erected at very great expense, to a sufficient extent to justify the hope that the pest may thus be kept in hand. Science has here again proved a faithful servant to practical experience; and experts are distinctly of opinion that, by inoculation with chicken-cholera wherever the rabbits spread in overwhelming numbers, they can be effectually dealt with; but if in addition the present drought wipes them out to a great extent, then it may be considered rather as a blessing than a scourge. In addition to the troubles which cattle-owners have to face, as previously referred to, they have to meet the presence of tuberculosis in their herds; and although there is evidence to justify the assertions that it does not exist to anything like the extent to which it obtains in some other places, yet in view of the fact that it is now generally admitted it can be communicated from stock to mankind, either through the flesh or through the milk, it is certainly desirable that provision should be made and maintained for a rigid inspection of stock both at the shambles and at the dairy.

I have already referred to the fact that the loss in horses was to some extent accounted for by the excess of exports. In like manner the diminished numbers in cattle and sheep are in a degree explained from the same cause; in addition to which must be taken into consideration the number slaughtered both for export as food and for home consumption, as well as those boiled down for tallow.

The following statement will best illustrate the real condition respecting the numbers of cattle and sheep, by focusing the numbers utilised under each head:—

	Cattle.	Sheep.
Number in the colony at end of 1895	6,822,401	19,856,959
Add annual "cast" that should under ordinary conditions be available—say, 10 per cent. for cattle, and 15 per cent. for sheep ...	682,240	2,978,544
	7,504,641	22,835,503
<i>Utilised during the year—</i>		
By excess of export over import	262,495	805,100
Killed mostly for export for food or as tallow ...	241,764	793,397
Killed for home consumption (estimated) ...	233,182	932,728
Total utilised	737,441	2,531,225
Total in colony at end of 1896... .. .	6,767,200	20,304,278
Total deficit, taking normal increase into account ...	6,507,377	19,593,696
	259,823	710,582

Thus the extreme losses for the year, allowing for such an increase as might reasonably be looked for, amount to a quarter of a million for cattle and three-quarters of a million for sheep. The latter figure at least compares most favourably with the experience of the drought years 1884-6.

The estimated consumption of cattle and sheep has been based on an allowance of half-a-bullock and two sheep *per capita* of the estimated mean population. There does not appear any feasible means of ascertaining the actual consumption for the whole colony, except at an expenditure that would not be warranted for the result to be attained, more particularly as statistics on the subject can be gauged with reasonable accuracy.

Even if a return were obtained from each butcher, the figures would then fall far short of the actual facts, because so many people in the country kill for themselves, of which no account is kept. Last year, however, the officers of my Department for the first time collected particulars from the inspectors of slaughter-houses, from which was compiled a table giving valuable information respecting the consumption of meat in the principal centres of population. This table has been continued for 1896. (*Vide Appendix, Table No. VII.*)

From a perusal of this it will be seen that the consumption of meat of all kinds for each inhabitant of the principal towns and their suburbs was 365 lb. This, on a population of 228,808 persons, amounts to a total consumption of 83,514,920 lb. The 365 lb. *per capita* quoted comprised the various kinds of meat in the following proportion:—Beef, 77 per cent.; mutton, 19 per cent.; veal, 1 per cent.; pork, 2 per cent.; and a small fraction of lamb. The average consumption of meat of all kinds in some of the countries of Europe are, according to Mulhall:—Boston, 306 lb.; Paris, 295 lb.; Vienna, 150 lb.; Berlin, 99 lb.; Naples, 75 lb. So that the inhabitants of Boston, who exceed with respect to this article of diet the consumption of the Parisians by 50 per cent., are themselves greatly exceeded by Queenslanders resident in the principal towns of the colony. Contrary to the experience of European

countries, I believe it is the rural inhabitants of Australia who are larger flesh-consumers than the denizens of populous centres. This, no doubt, is caused from the fact that the population of the country districts is largely comprised of men in the prime of life engaged in hard manual labour who require large supplies of meat to support them. Were it possible to obtain reliable statistics on this subject, there is little doubt that the consumption *per capita* for the whole colony would considerably exceed that shown in the table, which, as stated, comprises the consumption of meat by a population which chiefly consists of women and children. The waste also, which, of course, is included in consumption, would most probably be much greater under the conditions obtaining with respect to food supply in the country districts. On the whole, I am of opinion that the allowance of half-a-beast in connection with cattle is rather an under-estimate for the total consumption of beef *per capita*. When dealing with this subject, it must not be lost sight of that the average weight of cattle now slaughtered is somewhat below what it was when the consumption was fixed at that allowance, because the practice of speying cows for fattening has increased. The average dead weight of cattle slaughtered for town use is given at 648 lb.; whilst five years ago, when the scheme for the estimate was formulated, cattle were assumed at a mean dead weight of 750 lb.

DISPOSAL OF "CAST."

Some seven or eight years ago it became apparent that the annual surplus of live stock could no longer be disposed of in the colony, except by the wasteful process of boiling down for tallow; and the other colonies of Australia were so increasing the number of their live stock that any considerable market in that direction could no longer be looked for. This difficulty has since been enhanced by certain fiscal arrangements made by some of the colonies which appear to have in view a system by which the population of those colonies would be compelled to use home-raised meat, and thus afford a protection to stockraisers within their borders. Stockowners in this colony, having been thus compelled to face the alternative of fixing either a limit to the expansion of their herds or of finding a wider market for their increase, were forced to adopt the system of exporting their stock slaughtered and preserved, or frozen for food, as at that time any prospect of shipping live stock to Europe such as now offers was not anticipated. That the industry then initiated would be an important one was beyond question, but its volume has now assumed large proportions, and many of the initial difficulties have been overcome, although some yet remain to be combated. The questions of preservation by freezing and of transport have been conquered, and the chief trouble now rests with the satisfactory disposal of the meat in the home market. The producers complain that the prices they realise are totally out of proportion to the retail price of meat in the market, and imply that the middleman makes altogether too much out of the transaction; these in turn complain that while much of the Queensland meat is excellent, yet there is a want of grading at this end, and consequently that some of the carcasses are not only much inferior to British meat, but fall short of that imported from America, and that the unevenness in quality adversely affects the sale of all meat shipped from the colony. There is, perhaps, a certain amount of truth in both statements. It is now generally admitted that frozen meat is not equal to freshly killed, or even to chilled meat; and unless a means can be discovered which shall be found a sufficient preservative to protect meat during the long and hot voyage from Australia without absolutely freezing it, it does not seem possible to rival in appearance the English fresh meat or the American chilled meat. Several attempts have been made to accomplish this, but up to the present without success; still it is quite possible that before long some means may yet be devised which will bring this matter to a satisfactory issue.

The carriage of cattle alive to the United Kingdom has also been attempted, but the results did not warrant a continuance of the experiment. The opinion has, however, been freely expressed by an expert who has great experience in the shipping of live stock from America to England, that it will yet be found possible to ship cattle alive from Queensland at a better profit than can be obtained from the shipment of frozen meat. Full particulars respecting the frozen meat industry can be obtained on reference to Table No. V. in the Appendix.

The number of cattle and sheep slaughtered last year fell considerably short of the number so dealt with in 1895. There were 35 establishments engaged in the industry during 1896, which was 4 fewer than in the preceding year; but the number of hands employed was only 10 less than in 1895—namely, 2,838. Whilst several of these factories also combined the slaughter and preservation of pigs with that of cattle and sheep, 6 of them were entirely devoted to the former branch of the business. There were in all 241,764 cattle and 793,397 sheep slaughtered at these factories; the output of beef and mutton, both preserved and frozen, being 76,928,435 lb.—namely, 69,442,447 lb. of the former, and 7,485,988 lb. of the latter. Of preserved beef there were 19,197,234 lb., and frozen 50,245,213 lb.; whilst the mutton treated comprised 2,914,902 lb. of preserved, and 4,571,086 lb. of frozen. The total turnout for 1895 was 68,352,312 lb.—namely, 60,199,352 lb. of beef, and 7,485,988 lb. of mutton.

Of course, whilst the total number of cattle and sheep slaughtered are given with accuracy, it must be understood that the relative proportions of them which were preserved, frozen, or boiled down are approximate only. This will readily be understood when it is pointed out that different parts of the same beast are frequently devoted to all three processes—perhaps the hindquarters frozen, some of the best of the forequarters preserved, and some passed to the pot to be boiled for tallow, or turned into meat essence and extract. This accounts for the fact that, besides the meat already mentioned as having been preserved and frozen, there were 517,011 lb. of essence and extract and 12,736 tons of tallow turned out of the various slaughtering establishments of the colony, exclusive of tallow the by-product of the family butcher.

There were 67,034 pigs killed for food last year—exclusive of those killed by butchers—which with relation to the larger towns at least numbered 18,550 more; this was 8,164 more than in 1895. The first mentioned were not all slaughtered at factories, as this number also includes those killed by farmers. Although the latter were not nearly so numerous as the hogs killed at the factories, yet, as pig-raising has hitherto been classed as a part of the dairying industry, I am dealing with their slaughter in that section of this report.

A return was obtained for the first time in 1895, detailing particulars respecting the by-products of the slaughtering industry. Three establishments failed to make the return that year, but the information was obtained for 1896 from each of the 35 factories in operation.

The aggregate value of such by-products returned for 1895 was £353,609, the figures for 1896 showing a decline on this amount of £68,419. Full particulars concerning each item have been collected, and will be found detailed at Table VI. in the Appendix. The chief items, of course, are hides and skins, the aggregate value of which amounted to over a quarter of a million sterling, or 91 per cent. of the total amount—namely, for hides, £141,559; and for skins, £119,370. The returns show that the value of both hides and skins was somewhat greater in 1896 than in the previous year.

The gradual reduction in the number of sheep depastured on each holding, which has been marked year by year for some time past, was continued in 1896. This is really an important question in connection with the grazing of sheep, and has no doubt been in a degree instrumental in reducing the losses from drought in recent years. When enormous numbers of sheep—several hundred thousands—are on one holding and dependent upon the directions of one man, there is less opportunity for successfully meeting an emergency than would be the case if they were the property of a number of owners bent upon making the best provision possible for the comparatively few sheep dependent upon their exertions.

The following table shows, in each of the districts, the number of owners and the number of sheep grouped according to the size of the holding. Particulars for districts in which less than 100,000 sheep are depastured have been amalgamated:—

C.

Petty Sessions Districts.	50 and Under.		51 to 1,000.		1,001 to 5,000.		5,001 to 20,000.		20,000 and Upwards.		Total Number of Sheep.	
	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Total Owners.	Total Sheep.
Adavale ...	2	70	... 4	2,450	... 5	18,112	11	131,295	6	684,065	9	702,694
Aramac ...	...	...	2	850	1	1,340	1	10,000	3	146,705	22	298,562
Augathella ...	4	41	2	430	3	11,000	10	104,462	10	334,170	11	346,401
Barcaldine ...	5	63	2	430	3	11,000	10	104,462	10	954,705	30	1,070,660
Blackall ...	6	88	5	1,738	4	8,150	17	163,132	9	809,534	41	982,642
Boulia ...	1	27	...	...	...	...	9	16,590	2	89,872	4	106,489
Charleville ...	18	143	16	4,562	4	11,960	9	84,797	5	381,636	52	483,098
Clermont ...	16	186	3	1,480	2	7,390	2	14,500	8	617,500	31	640,966
Cloncurry ...	7	77	...	...	...	...	2	72,168	3	281,675	12	353,920
Cunnamulla ...	5	69	9	5,266	16	51,334	38	312,252	11	969,882	79	1,338,803
Dalby ...	25	617	63	34,116	32	85,182	13	77,083	6	223,171	139	420,169
Eulo ...	1	49	1	66	...	...	4	61,790	4	131,662	10	193,567
Goondiwindi ...	3	27	10	4,314	11	26,952	5	59,535	3	178,392	32	269,220
Hughenden ...	7	43	2	540	...	...	13	140,416	14	1,163,369	36	1,304,368
Hungerford ...	3	61	...	...	...	...	2	18,986	3	205,368	8	224,415
Ixisford ...	1	43	1	90	...	...	1	13,600	6	827,585	9	841,318
Longreach ...	8	86	7	3,530	12	29,863	20	206,170	13	1,766,037	60	2,005,686
Mitchell ...	12	179	18	6,603	5	7,750	...	...	4	156,301	39	170,833
Muttaburra ...	1	4	1	167	3	11,000	10	122,720	16	1,560,213	31	1,694,104
Roma ...	26	298	26	9,985	11	24,746	5	43,207	3	141,848	71	220,084
St. George ...	10	157	5	1,508	4	18,650	14	137,189	20	1,320,689	53	1,484,193
Springsure ...	12	213	4	625	7	13,900	1	5,620	5	263,313	29	283,571
Surat ...	5	86	7	4,420	9	25,789	7	60,220	4	177,500	32	268,015
Tambo ...	5	95	4	1,360	3	10,800	6	77,691	8	508,498	26	598,444
Thargomindah ...	2	14	1	400	3	8,932	7	82,172	5	299,966	18	391,484
Toowoomba ...	33	338	88	38,234	28	54,552	6	46,030	11	604,047	166	743,201
Warwick ...	16	248	56	22,770	16	33,728	3	18,786	2	60,183	93	135,715
Windorah ...	4	75	7	2,553	1	3,300	2	12,807	4	340,846	18	359,561
Winton ...	2	100	2	195	5	24,500	10	96,166	10	1,181,861	29	1,302,822
All other Districts	268	4,539	162	40,009	28	57,443	12	136,693	4	120,007	474	358,691
Totals ...	508	8,036	506	188,241	213	546,183	233	2,314,636	204	16,506,600	1,664	19,593,696

There were 1,664 separate holdings on which sheep were depastured during 1896, which gives 11,755 sheep to each owner, the smallest number yet recorded. Irrespective of flocks of less than 1,000 sheep, 213 persons held 546,183 sheep in flocks numbering between 1,000 and 5,000, or an average of 2,564 sheep. The largest number of owners are found amongst those holding between 5,000 and 20,000—namely, 233 with an average flock of 10,063 sheep. Although the ownership is becoming more distributed year by year, yet 84 per cent. of the total number are still held in flocks exceeding 20,000. The average size for each of these for 1896 was 80,915.

The average number of sheep to each holding in the colony for the past seven years was as follows:—

Year.	No. of Owners.	No. of Sheep.	Average Size of Flocks.
1890 ...	849	18,007,234	21,210
1891 ...	1,018	20,289,633	19,931
1892 ...	1,496	21,708,310	14,511
1893 ...	1,440	18,697,015	12,984
1894 ...	1,584	19,587,691	12,366
1895 ...	1,637	19,856,959	12,130
1896 ...	1,664	19,593,696	11,775

There were 29 districts in which the number of sheep depastured exceeded 100,000, and 7 with upwards of 1,000,000.

The ownership of cattle is much more generally diffused than is the case with sheep. Instead of 1,664—the number of owners with respect to sheep in 1896—the numbers of owners of cattle were 22,702, who between them depastured 6,507,377 cattle, which gives an average of 287 head to each owner.

The following table supplies particulars on this head, giving details of all districts in which the numbers exceed 100,000, and aggregating the remainder into one sum:—

D.

Petty Sessions District.	Owners.	1 to 100.	Owners.	101 to 300.	Owners.	301 and upwards.	Total Owners.	Total Cattle.
Alpha	76	2,197	6	1,450	11	114,867	93	118,514
Banana	45	662	4	711	23	110,879	72	112,252
Boulia	9	285	1	250	22	254,360	32	254,895
Bowen	268	2,949	11	2,361	38	196,309	317	201,619
Burke	16	2,096	—	—	21	160,986	37	163,082
Cape River	29	959	4	877	32	127,642	65	129,478
Charleville	296	3,192	20	3,210	22	116,634	338	123,036
Charters Towers	234	7,293	25	4,340	23	131,872	282	143,505
Clermont	137	3,970	26	4,241	35	168,660	198	176,871
Cloncurry	28	953	12	2,073	17	293,079	57	296,105
Etheridge	41	1,933	10	3,218	18	141,908	69	147,059
Gayndah	84	2,591	2	403	20	137,780	106	140,774
Gladstone	211	4,317	22	4,764	40	104,262	273	113,343
Hughenden	86	2,448	10	2,372	34	293,039	130	297,859
Mackay	253	14,672	48	9,193	47	159,493	348	183,358
Mitchell	95	1,855	5	896	29	130,073	129	132,824
Norman	36	340	5	1,153	23	229,495	64	230,988
Rockhampton	538	15,420	75	14,747	110	205,299	723	235,466
St. Lawrence	34	1,233	4	883	28	139,155	66	141,271
Springhurst	119	3,526	11	2,121	31	181,015	161	186,662
Taroom	54	1,157	5	880	25	153,661	84	155,698
Thargomindah	23	1,125	6	1,089	22	313,421	51	315,635
Windorah	10	348	9	1,456	22	257,678	41	259,482
Winton	37	1,188	8	623	14	143,801	59	145,612
All other Districts	17,411	329,100	880	141,526	616	1,631,363	18,907	2,101,989
Totals	20,170	405,809	1,209	204,837	1,323	5,896,731	22,702	6,507,377

The proportion of 287 to each owner, above quoted, shows a considerable reduction on the average number which obtained in 1895—namely, 319.

The average number held by each individual is much reduced by the great number of persons resident in or near the centres of population, who keep just one or two head of cows and calves. Thus of the 20,170 persons who owned less than 100 cattle, the average was only 20 head to each owner. The average size of herds in the next group—101 to 300 head—was 169 head. Ninety per cent. of the total number of cattle were held in herds of upwards of 300 head, and averaged 4,457 in number.

In 24 districts the number of cattle depastured exceeded 100,000; whilst in 5 of them the numbers were upwards of 250,000—namely, Thargomindah, 315,635; Hughenden, 297,859; Cloncurry, 296,105; Windorah, 259,482; and Boulia, 254,895.

EXPORT OF LIVE STOCK.

With respect to the possibility of shipping live stock to Europe I have already made slight reference, but at present it is only with the southern colonies that any extensive trade in live cattle and sheep takes place. With regard to both kinds of live stock the balance has been largely in favour of the exports, although this condition has been much more pronounced with respect to cattle than with respect to sheep, the exports of the latter having in no year been less than the imports, whilst upon some occasions the number of sheep entering the colony have considerably exceeded those sent out.

The imports and exports of live stock for the past ten years are shown in the following table:—

E.

Year.	Horned Cattle.		Sheep.	
	Inwards.	Outwards.	Inwards.	Outwards.
1887 ...	1,752	202,283	580,885	118,570
1888 ...	1,111	188,748	234,167	248,804
1889 ...	1,867	175,117	222,369	311,583
1890 ...	3,684	494,944	386,625	472,282
1891 ...	3,535	210,240	281,670	513,201
1892 ...	6,923	130,989	463,323	421,318
1893 ...	7,003	183,663	223,655	1,016,945
1894 ...	2,286	135,858	156,596	430,646
1895 ...	5,590	80,620	186,007	295,032
1896 ...	10,127	272,622	94,620	899,720

This shows with regard to cattle that, whilst during the past ten years 43,878 have entered the colony, the exports have amounted to 2,075,084 head. The largest export during the period was in 1890, when nearly 500,000 cattle were sent from the colony, whilst the imports were fractional. The imports for 1896 were the largest recorded during the decade. The number of sheep outwards was only once exceeded during the ten years under review—namely, in 1893, when upwards of 1,000,000 were sent from the colony. The net exports for last year exceeded those for any of the ten—that of 1893 included. For the ten years the imports amounted to 2,829,917, and the exports to 4,728,101, leaving a balance in favour of the latter of 1,898,184, which is less than the net export of cattle for the same period.

DISTRIBUTION OF STOCK.

Very considerable fluctuations have been apparent as to the number of stock depastured in each of the various divisions and districts of the colony. At all times much disturbance in this respect is occasioned by the necessary movements connected with the marketing of stock; and frequently unfavourable seasons—by occasioning a large amount of removals from place to place to secure food and water, or the necessity of selecting a fresh route to a railway station or to a centre of disposal—materially vary the numbers of cattle and sheep in given areas from year to year.

The number of cattle and sheep in each of the three great divisions of the colony last year was as follows :—

F.

Division.	Year.	Cattle.	Sheep.
SOUTHERN	1895 1896	2,678,019 2,565,491	9,029,846 8,452,572
Numerical Increase in 1896	...	112,528	577,274
Numerical Decrease in 1896
Centesimal Increase in 1896
Centesimal Decrease in 1896	...	4·20	6·39
CENTRAL	1895 1896	1,946,352 1,991,769	9,217,061 9,434,826
Numerical Increase in 1896	...	45,417	217,765
Numerical Decrease in 1896
Centesimal Increase in 1896	...	2·33	2·36
Centesimal Decrease in 1896
NORTHERN	1895 1896	2,198,030 1,950,117	1,610,052 1,706,298
Numerical Increase in 1896	96,246
Numerical Decrease in 1896	...	247,913	...
Centesimal Increase in 1896	5·98
Centesimal Decrease in 1896	...	11·28	...

From this, it is seen that the decrease in cattle was in the Southern and Northern divisions, whilst the Central showed an increase. The decrease in the Northern division, which amounted to 11 per cent. against 4 per cent. in the South, was probably the result of the mortality due to redwater, caused by the attacks of the ticks which overran the Northern coastal districts during 1896.

In both the Central and the Northern districts an increase in the number of sheep was recorded, the decrease in the South amounting to upwards of half-a-million, or more than 6 per cent. of the total number depastured during 1895.

Fuller details respecting the number of cattle and sheep in each division will be found at Tables Nos. II., III., and IV., in the Appendix. On referring to Table II., which gives the number of live stock in each district of the Southern division, it is at once seen that the decrease in cattle was mainly contributed by the Western districts, where the drought was most severely felt. The most considerable increase (and this only amounted to 18,000) was in Adavale, for the apparent increase of a like amount in Eidsvold was caused by the transfer of one station wrongly returned in Gayndah district in the previous year. On referring to the column showing the decreases in the number of cattle, the localities where the drought was most severely felt become at once apparent. In Thargomindah alone a loss of 70,000 was recorded, which is considerably more than half the entire net decrease of the division. The next highest decrease was in the adjoining district of Eulo—namely, 13,766; for the apparently larger decrease shown in Gayndah has to be discounted on account of the error above referred to with respect to the increase in Eidsvold. The Roma-Mitchell area was also evidently severely affected. Passing to sheep, amongst which the net decrease amounted to 577,274 head, the increases of any moment are found in only four districts—Toowoomba, Mitchell (where there was a considerable decrease in cattle), Tambo, and Adavale. The latter district was especially fortunately placed, as rain fell there over a circumscribed area during the drought which was so severely affecting the surrounding localities. The largest decrease was in St. George—namely, 236,116; although in Thargomindah, where there was such a heavy loss of cattle also recorded, a decrease of 208,876 sheep occurred. No other decreases reached to 60,000 head.

In the Central division a much more satisfactory condition obtained, for although the eastern portion was affected by ticks, yet this was later in the year than in the more Northerly districts, and the worst effects were not felt until 1897. The aggregate increase in eleven districts amounted to 158,966, whilst the total recorded decreases in eight districts amounted to 113,549, leaving a net increase of 45,417. Passing to sheep, the most striking difference between the figures for 1895 and 1896 is an increase of 476,188 in Longreach, and a decrease of 316,947 in Muttaburra. Strictly speaking, the numbers for these two districts should be read together, as a change was made in the boundaries during last year by which three large stations were excluded from Muttaburra and included in Longreach. This transfer accounts for upwards of 300,000 of the difference.

In the Northern division, where, as already mentioned, tick-fever or redwater extensively prevailed, the loss in cattle was both actually and also relatively more than twice as great as in the drought-affected Southern area. The principal increases were in the Flinders Basin in the district of Norman, Cloncurry, and Hughenden; although there was also an increase of 21,194 in Cape River, but this was chiefly due to transfers from Charters Towers. The Flinders country was the first attacked by ticks, and the mortality was not pronounced there last year; indeed, it would appear that the immunity which some persons claim for herds which have undergone the attack of tick-fever appears to have been really acquired by the cattle in this portion of the colony. On referring to the figures respecting districts on the Eastern waters, the difference is at once manifest. Somerset alone excepted—for the increase in Cape River was only an apparent one—every district in the area in question showed a decrease. The losses being due to ticks, and not to drought, sheep were not adversely affected, and a net increase of 96,246 was returned. The total gross increase was practically confined to Hughenden, whilst 73 per cent. of the gross decrease was in Cloncurry.

PROPORTION OF LIVE STOCK TO AREA AND POPULATION.

The capacity for pasturage in a country and the meat requirements of its population are questions of paramount importance in connection with live stock production therein. The amount of meat required is capable of measurement with reasonable accuracy, and is not subject to much fluctuation, although of course it may be, and frequently is, gradually affected by changes such as differences in the age conditions in the population, or by the increasing or decreasing facilities for obtaining other kinds of food, and by other causes. The capacity of the natural pasture—especially in a country of such large area as Queensland—is a much more difficult question to determine, because, having in view the great varieties of soil to produce pasture, the uncertainties of seasons, the undetermined extent of scrubs and their rapidly increasing size, and other causes too numerous to mention, it can be but little more than guessed at.

To arrive at some idea on this subject, the most important matter which is so closely allied to both questions is the density of live stock in the country and their number as compared with the population which inhabit it. The following statement, I think, fully illustrates both these points with respect to Queensland:—

	Southern Division.		Central Division.		Northern Division.		Colony.	
	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.
Horses	1·02	0·66	0·65	2·42	0·41	1·10	0·68	0·96
Cattle	12·26	7·95	9·53	35·49	7·79	20·88	9·73	13·78
Sheep	40·39	26·20	45·15	168·10	6·82	18·27	29·31	41·50
All kinds in terms of Sheep	173·18	112·32	146·96	547·19	88·85	238·11	133·42	188·89
Pigs ... ... ...	...	0·25	...	0·15	...	0·09	...	0·21
All kinds, including pigs, in terms of Sheep ...	...	112·57	...	547·34	...	238·21	...	189·10

In this statement the aggregate number of all live stock has been reduced to one denominator, horses-cattle having been converted to sheep-pigs on the basis of 1 to 10.

For the purpose of comparing the condition as to the density of live stock in this colony, and also as to their proportion to population, with countries of nearly allied characteristics, I instance the positions with respect to these matters which are to be found in the neighbouring colonies of Victoria and New South Wales:—

	Per Square Mile.	Per Capita.
Victoria	408	30
New South Wales	279	69
Queensland	134	189

Thus whilst in Queensland there are only one-half the number of live stock to each square mile as compared with New South Wales, and one-third as compared with Victoria, yet with respect to the number of stock to population this colony exceeds the other two by three times in the case of New South Wales and by six times in the case of Victoria.

A great difference would naturally be looked for on a comparison between Queensland and European countries as to the relative proportion of live stock and population, but there is also a very marked difference—though greatly less in degree—in the same direction when the figures relating to some of the other great live stock producing countries are considered. In illustration of this the following statement has been prepared, which shows, on the authority of Mulhall, the number of each kind of live stock to each 100 of the inhabitants in the different countries named:—

	Horses.	Cattle.	Sheep.	Pigs.
Europe	11	30	58	15
United States	25	75	68	69
Canada	23	80	54	25
Argentine	120	605	1,860	11
Uruguay	110	1,140	1,800	5
Australia	40	250	2,600	30
Queensland	96	1,378	4,150	21

Thus Queensland stands first with respect to surplus cattle and sheep. The two South American Republics, however, somewhat exceed with respect to horses, whilst the United States are *facile princeps* in pigs. But although, as already stated, Queensland exceeds the other countries as to the relative number of horned cattle, yet the small numbers held by the other more populous colonies of Australia reduce the ratio for the whole continent to less than half that for Argentine and to but little more than a fifth of that for Uruguay.

BUTTER, HONEY, CHEESE, AND BACON.

Of all these products, which until recently might for all practical purposes be spoken of as the output of the dairy farmer, there was an increased production during 1896; and this was more particularly the case with respect to butter.

The following table gives particulars respecting these industries, the information being given in detail with respect to districts of importance, so far as dairying is concerned, and aggregated in the other districts, so as to keep the table within reasonable limits:—

G.

Petty Sessions District.	Butter.		Honey.		Cheese.	Bacon.			
	Producers.	Lb.	Hives.	Lb.	Lb.	Pigs Slaughtered.	Fresh Pork, Lb.	Salt Pork, Lb.	Bacon and Hams.
Allora ...	121	149,455	7	86	14,936	420	10,397	8,608	45,041
Beaudesert ...	135	136,484	89	2,581	53,140	440	1,050	450	52,748
Brisbane ...	250	2,199,124	902	39,227	8,960	27,893	147,557	9,817	2,177,177
Bundaberg ...	235	265,735	179	3,306	6,775	593	21,062	12,142	28,820
Caboolture ...	56	75,470	862	38,026	102,475	199	3,104	6,440	14,500
Charters Towers ...	39	34,186	201	10,194	...	474	30,938	...	400
Clermont ...	29	13,197	88	5,460	80	616	36,530	510	7,932
Crow's Nest ...	30	25,862	284	9,706	40,813	366	80	80	43,136
Dalby ...	99	41,483	78	2,506	118,320	332	3,630	4,221	40,930
Dugandan ...	38	19,159	252	4,110	8,868	467	60	200	52,228
Esk ...	120	61,691	164	7,340	39,599	532	8,320	1,200	44,173
Gatton ...	123	83,559	329	9,802	4,775	1,819	14,698	36,160	131,072
Gympie ...	101	100,097	472	15,571	7,466	1,144	54,701	1,082	52,319
Harrisville ...	170	77,116	378	5,204	359,905	795	6,100	1,910	79,875
Highfields ...	237	198,430	274	18,936	93,460	619	1,300	600	92,106
Ipswich ...	242	200,927	422	11,958	1,050	1,727	74,411	9,127	95,337
Killarney ...	84	24,119	878	51,040	3,238	305	740	3,125	35,193
Laidley ...	86	42,584	441	15,429	9,202	3,398	7,060	29,580	276,110
Logan ...	331	167,946	1,851	99,140	4,812	1,281	25,150	38,241	74,027
Marburg ...	78	76,713	367	5,270	2,080	482	2,240	47,143	9,881
Maryborough ...	165	125,489	567	18,714	2,368	438	11,135	3,500	42,482
Nerang ...	72	85,470	739	33,590	7,151	431	12,818	1,462	28,775
Redcliffe ...	57	213,635	300	11,379	28,906	1,000	57,753	6,700	11,496
Rockhampton ...	112	108,821	596	57,828	33,588	1,566	21,536	4,552	73,391
Rosewood ...	49	43,764	448	24,408	3,604	565	2,254	17,491	25,470
South Brisbane ...	63	429,117	667	30,556	3,740	9,791	31,415	3,630	906,498
Tiaro ...	63	58,123	100	2,711	81,887	597	22,770	3,804	38,990
Toowoomba ...	423	714,428	237	12,413	465,708	3,262	158,941	5,489	329,050
Warwick ...	132	92,163	358	27,892	377,096	633	4,008	3,165	61,455
Woodford ...	48	71,341	122	6,656	7,690	79	980	250	6,846
All Other Districts	449	228,552	2,513	129,658	29,412	4,770	160,246	26,301	231,268
Total, 1896 ...	4,237	6,164,240	15,165	710,697	1,921,404	67,034	932,984	287,050	5,008,726
" 1895 ...	4,060	3,719,523	12,702	595,928	1,841,799	58,870	606,268	318,757	4,941,512

N.B.—This Table includes the products of both factories and private makers.

BUTTER.—This product is rapidly ceasing to be classed as the product of the dairy farmer; his article of trade in connection with it will shortly consist wholly of milk, or perhaps cream; and the finished articles—butter and cheese—be the outcome of distinct industries; thus a division of labour has been made to the advantage of all concerned.

There were thirty-one factories engaged in the manufacture of butter and cheese last year, which gave employment to 234 persons, and which were worked for the most part by steam-driven machinery, employing engines aggregating 186 horse-power. There were twenty-nine separators worked at these factories, in addition to 156 employed at various detached creameries, the produce of which was further manipulated at one or the other of the factories.

There were 2,444,717 lb. more butter made in 1896 than in the previous year, an increase of 66 per cent.; but the number of butter-makers only increased by 177, or 4 per cent. over the number for 1895. Of the 6,164,240 lb. manufactured, 3,256,468 lb., or 53 per cent., were the output of factories. In 1895 the like proportion was only 23 per cent. The factory-made butter required 5,925,000 gallons of milk to produce it. Estimating the remaining quantity of butter produced outside these establishments on a like basis, there were 11,180,000 gallons of milk turned into butter last year. Taking the annual consumption of butter in Queensland at about 11 lb. *per capita*, on the basis of the experience of other years, 5,130,000 lb. of butter are required to supply the home demand; leaving about 1,034,000 lb. of the 1896 manufacture available for foreign disposal. But in addition to this, last year the imports exceeded the exports by nearly 1,000,000 lb.; so that either a large quantity of butter must have been in store at the commencement of this present year, or a greatly increased consumption must have ensued. In consequence of the greater quantity of this commodity available, and of the greater evenness in the price that has recently obtained, it is very probable that, at least to a certain extent, increased consumption of the article accounted for the excess. The facilities of cold-storage which now exist render the keeping of large stocks an easy matter, and thus those extreme fluctuations in the supply, and therefore in the price, that formerly was so frequent is prevented. There were some shipments of butter made during the early part of the present year. The actual figures for the whole colony are not available, but from Brisbane alone 144,154 lb., valued at £5,365, were exported, whilst for the whole of 1895 the Queensland exports only amounted to 13,942 lb.

The returns do not provide for data from which conclusions could be formed as to the average yield per cow of milk, cream, or butter obtained, because it would be almost hopeless at present to collect such particulars; but there is no doubt that if it could be accomplished the collection and compilation of returns on this subject would be most useful. According to Mulhall, English cows average 400 gallons of milk per annum, and a good cow returns about 140 lb. of butter. If statistics on this subject were available for Queensland a comparison of the result with the foregoing would be interesting to Queensland dairymen.

HONEY.—There was a considerable increase of both the number of stocks and also of honey obtained last year, but the average yield was exactly the same as in 1895. The mean returns for each hive for the past four years were—1893, 53 lb.; 1894, 45 lb.; 1895, 47 lb.; and 1896, 47 lb. Grouping the districts in some instances so as to be representative of certain recognised localities, the average yields were, in different parts of the colony, as follow :—

	lb.		lb.
Moreton East 47	47	Darling Downs South 64	64
Moreton West 31	31	Rockhampton 97	97
Darling Downs North 57	57	Charters Towers 51	51

The West Moreton group of districts showed the poorest results; East Moreton was equal to the total average of the colony; the Downs gave good returns, whilst in Rockhampton the high average of 97 lb. per hive was secured; and the 51 lb. obtained at Charters Towers in the North was very satisfactory.

CHEESE.—The large increase in cheese production so noticeable in 1895 was maintained during the following year; but only a slight additional advance was made, the output for 1896 exceeding that for 1895 by 79,605 lb. only. The *per capita* consumption of this commodity is a very small one—only from 4 to 5 lb.—and thus there would be abundant room for the manufacture of a greatly increased quantity of cheese for the supply of the home demand, without any recourse to export, if this very wholesome and nutritious article of diet were only used to anything like the extent that obtains in most civilised countries. Of the 1,921,404 lb. of cheese made during 1896, 1,361,725 lb., or 71 per cent. of the total, were produced at factories, of which there were twenty-two in operation. In twelve of them the manufacture was worked in conjunction with butter-making.

Although cheese was made in a great many districts, together presenting a very large area and wide range, yet the great bulk of the output was contributed by a few districts only. In the five districts in which the production exceeded 100,000 lb. the aggregate quantity made was 1,423,504 lb. or 74 per cent. of the total—namely, Toowoomba, 465,708 lb.; Warwick, 377,096 lb.; Harrisville, 359,905 lb.; Dalby, 118,320 lb.; and Caboolture, 102,475 lb. In Highfields and Tiaro, although the output did not amount to 100,000 lb., yet the quantity made was very considerable.

BACON.—Last year witnessed an increased activity in the industry relating to this branch of dairy farm products. As in the case of butter and cheese, so is the slaughter and preservation of pigs for food being taken away from the farmer to at least an equal if not greater extent, and is becoming the object of a special industry. Of the 5,295,776 lb. of bacon, hams, and salt pork preserved during 1896, 3,425,140 lb. were the products of factories, amounting to 65 per cent. of the total production. A noticeable feature in connection with this subject was the much greater extent to which fresh pork was utilised for food last year. In 1895, 603,268 lb. of pork were consumed fresh, whilst in 1896 the quantity increased to 932,984 lb. The average weight of each pig slaughtered was 93 lb., or 7 lb. less than the mean weight for 1895. The average weight for the past four years has been—1893, 71 lb.; 1894, 97 lb.; 1895, 100 lb.; 1896, 93 lb.

The Petty Sessions Districts of Brisbane and South Brisbane comprise the chief centres of this industry. In these two districts 37,684 pigs out of a total of 67,034 were slaughtered, or 56 per cent. of the total number. The hogs killed in these districts were rather a light average, having a mean weight of 87 lb. In eight other districts the number slaughtered amounted to 1,000, and the number and average weight in each was—Laidley, 3,398 pigs, 92 lb. average weight; Toowoomba, 3,262 pigs, 151 lb. average weight; Gatton, 1,819 pigs, 100 lb. average weight; Ipswich, 1,727 pigs, 104 lb. average weight; Rockhampton, 1,566 pigs, 64 lb. average weight; Logan, 1,281 pigs, 107 lb. average weight; Gympie, 1,144 pigs, 94 lb. average weight; Redcliffe, 1,000 pigs, 76 lb. average weight.

AGRICULTURE.

Although the extent of the agricultural industry of the colony is in no way commensurate with its possibilities, it is satisfactory to be in a position to record year by year an expansion of the area brought under the plough.

The area under cultivation during 1896—namely, 336,775 acres—is not only the largest ever returned, but the increase on the acreage of the previous year—37,497 acres—is the largest yet recorded, although the increase of 32,477 acres in 1894 was relatively the same—that is, 13 per cent. on the figures of the previous year. The ratio of increase in 1889, which on an actual increase of 33,071 acres amounted, however, to 15 per cent. on the acreage for 1888, was an even more satisfactory proportion.

In connection with the increased area brought under the plough, it may be noted that the area thus brought into use was principally allotted to grain crops, amongst which rice was the only one showing a decrease in the area sown; whilst, in round figures, maize with 15,000, wheat with 9,000, and oats with 1,000 acres occupied 25,000 acres of the total increase in area under cultivation. Sugar-cane, lucerne, and panicum were crops of which substantial increase in area were planted.

As to results obtained from the extra area cultivated, it may be stated that the return from cereals in 1896 was a good one, and proved a marked contrast to that for 1895, when the return from all cereals was poor, maize and rye giving the best returns; but the crop of wheat was a distinct failure. Notwithstanding the increased attention given to agriculture as illustrated by the returns for 1896, there is plenty of room for further expansion, as will be seen from the following statement, showing the value of various products of agriculture which have been imported into the colony for the past five years :—

Value of—	1892.	1893.	1894.	1895.	1896.
Grain, &c., and Various Products thereof	£ 554,367	£ 495,418	£ 432,237	£ 453,627	£ 681,161
Fruit	102,158	83,975	89,141	84,652	100,410
Vegetables	40,049	58,435	61,936	51,413	109,939
Other Products of Agriculture	83,683	84,412	101,963	102,775	109,488
	780,257	724,270	685,277	692,467	1,000,998

Increase value in 1896 over 1895, £308,531.

The imports of products of the kind for 1896 exceeded those for 1895 by £308,531. The largest portion of this expenditure is to be attributed to the failure of the wheat crop for 1895, which compelled millers and others to make up the deficiency thus occasioned in the supply of breadstuff by heavy imports of wheat and flour from other sources. The expenditure on these two items alone amounted in round figures to £241,000, about equal proportions having been expended for each commodity.

Leaving out of consideration the increased imports of breadstuff required to make good the failure of the wheat crop of 1895, there is still in other respects ample scope for increased energy in agricultural operations. The total value of grain and their various products imported was £681,161. Allowing the expenditure as mentioned above—£241,000—to replace the wheat crop failure as being unavoidable, yet a sum of £440,000 still remains which was spent abroad in the purchase of provisions which could have been grown in the colony. No doubt the season which was disastrous to grain crops in 1895 was also unfavourable to most of the other crops of the agriculturist, and may also have led to the increased importation of other kinds of provisions as well as grain, and their loss may be surmised from the fact that there was an increase of 18 per cent. in fruit of all kinds, and of 50 per cent. in vegetables, chiefly potatoes and onions. The former were imported to the value of £82,382, and the latter to the value of £21,905 during 1896—a strange anomaly, having in view the suitability both of soil and climate in this colony for the production of vegetables of the kinds mentioned. Amongst imports of miscellaneous products are to be found hay and chaff to the value of £38,384, for the appearance of which it would be difficult to offer any justification, except that by some persons the article produced in the southern colonies is considered better feed than can be produced here, apparently more care being taken in growing and saving it.

AREAS OF FARMS.

As already pointed out, not only was there an important increase in the acreage under cultivation, but there was also a considerable addition to the number of those engaged in agricultural pursuits. The increase has been in the direction of the greater number of farms of a reasonable size. The number of persons engaged in agriculture cultivating less than 5 acres has declined, the increase being mainly in farms of 20 acres and upwards of land under the plough.

The following statement shows for the past five years the number and the acreage tilled of cultivated holdings, grouped in accordance with the area under plough:—

Year.	NUMBER OF CULTIVATED AREAS IN EACH GROUP.					TOTAL AREA CULTIVATED IN EACH GROUP.				
	5 acres and under.	Above 5 acres and not exceeding 20.	Above 20 acres and not exceeding 50.	Above 50 acres.	Total.	5 acres and under.	Above 5 acres and not exceeding 20.	Above 20 acres and not exceeding 50.	Above 50 acres.	Total.
1892	3,653	4,409	2,523	854	11,439	8,710	52,850	78,112	121,156	260,828
1893	2,711	4,616	2,724	890	10,941	6,342	50,901	80,343	114,489	252,075
1894	3,052	4,707	2,910	1,039	11,708	8,197	55,863	90,596	129,896	284,552
1895	2,993	4,844	3,132	1,069	12,038	8,138	57,970	96,843	136,327	299,278
1896	2,922	5,011	3,560	1,333	12,826	8,269	60,660	110,402	157,444	336,775

The falling off apparent in 1893 in the under 5 acres group was partly due to the fact that a large number of market gardens established on small alluvial patches were deserted, and subsequently a further reduction was probably due to the fact that, with the financial depression of the same period, many were no longer able to make even an existence, and, being unable to obtain odd jobs of work to eke out a living, were forced to move to districts where work was more plentiful, or where they could obtain larger holdings on easy terms. The next group shows a slight increase, but it is in the last two groups in which the greatest progress is apparent.

Detailed information on the same subject for 1896, giving particulars for each district, will be found in the following table:—

H.

Petty Sessions District.	ACRES UNDER CULTIVATION.									
	5 Acres and under.		Above 5 and not exceeding 20 Acres.		Above 20 and not exceeding 50 Acres.		Above 50 Acres.		Totals.	
	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.
Adavale	7	14	...	...	...	...	...	...	7	14
Allora	7	18	23	309	77	3,602	208	24,616	315	28,545
Alpha	9	9	...	...	...	...	...	...	9	9
Aramac ... ...	...	...	...	...	...	...	...	...	...	...
Augathella ... ...	...	...	...	...	...	...	...	...	...	...
Ayr	2	11	13	173	25	881	21	6,230	61	7,295
Banana	12	20	2	17	...	...	...	...	14	37
Barcaldine	1	3	2	14	2	71	...	...	5	88
Beaudesert	52	109	108	1,276	53	1,414	9	568	222	3,367
Biggenden	27	76	45	437	4	143	1	85	77	741
Blackall	17	31	...	...	1	40	1	53	19	124
Boulia ... ...	...	...	...	...	...	...	...	...	...	...
Bowen	11	35	41	471	17	554	5	371	74	1,431
Brisbane	297	925	322	3,318	33	855	1	53	653	5,151
Bundaberg	25	77	142	1,898	153	5,003	90	14,539	410	21,517
Burke	3	9	...	...	...	...	...	...	3	9
Caboolture	45	134	52	591	13	367	...	...	110	1,092
Cairns	14	48	29	354	20	666	30	5,864	93	6,932
Camooweal ... ...	...	...	...	...	...	...	...	...	...	...
Cape River	5	19	2	14	...	...	...	...	7	33
Cardwell	8	36	...	...	2	46	...	...	10	82
Charleville	10	24	2	21	...	...	...	...	12	45
Charters Towers	38	89	2	27	1	22	...	...	41	138
Childers	4	14	74	965	129	4,189	65	6,785	272	11,953

H—continued.

Petty Sessions District.	ACRES UNDER CULTIVATION.										
	5 Acres and under.		Above 5 and not exceeding 20 Acres.		Above 20 and not exceeding 50 Acres.		Above 50 Acres.		Totals.		
	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	
Clermont	19	39	5	69	2	62	...	...	26	170
Cleveland	68	127	27	257	18	377	...	...	113	761
Clonecurry	14	28	...	...	...	...	...	...	14	28
Condamine	2	4	1	13	...	...	...	...	3	17
Cool	20	51	37	368	7	193	1	60	65	672	
Crow's Nest	33	83	147	1,890	64	1,839	4	349	248	4,161	
Croydon	30	109	8	73	...	...	...	...	38	182
Cunnamulla	4	9	12	40	...	...	...	...	16	49
Dalby	54	141	110	1,242	39	1,208	5	464	208	3,055	
Diamantina	1	1	...	...	...	...	...	...	1	1
Douglas	13	38	31	394	20	727	8	793	72	1,952	
Dugandan	18	67	138	1,831	186	5,398	18	1,016	360	8,312	
Eidsvold	7	25	14	172	2	65	1	56	24	318	
Emerald	15	32	8	81	...	...	...	...	23	113
Esk	69	141	85	954	49	1,524	11	870	214	3,489	
Etheridge	28	74	6	78	8	250	...	...	42	402
Eulo	...	...	...	...	...	...	...	...	...	...
Gatton	44	138	259	3,299	269	7,934	39	2,886	611	14,257	
Gayndah	23	62	5	35	1	29	...	...	29	126
Gin Gin	5	31	28	358	31	957	15	2,105	79	3,451	
Gladstone	13	34	24	253	3	72	2	127	42	486	
Goodna	22	65	24	299	10	307	5	374	61	1,045	
Goondiwindi	17	43	5	52	1	27	1	52	24	174	
Gympie	80	216	103	1,191	32	971	6	498	221	2,876	
Harrisville	16	42	105	1,405	128	4,182	17	1,542	266	7,171	
Herberton	26	82	48	592	30	926	13	1,046	117	2,646	
Highfields	26	92	157	2,112	173	5,049	27	1,886	383	9,139	
Hughenden	3	11	4	49	1	36	...	...	8	96
Hungerford	...	...	...	...	...	...	...	...	...	...
Ingham	9	21	41	577	53	1,924	45	5,691	148	8,213	
Inglewood	27	72	33	387	10	287	...	...	70	746
Ipswich	111	315	164	1,824	111	2,743	11	974	397	5,856	
Isisford	6	13	1	9	...	...	...	...	7	22
Killarney	24	84	39	508	50	1,631	56	6,131	169	8,354	
Laidley	14	53	133	2,199	255	8,017	80	5,774	482	16,043	
Logan	97	261	249	2,897	65	1,780	6	429	417	5,367	
Longreach	8	14	...	...	...	...	...	...	8	14
Mackay	79	270	259	3,376	237	7,641	93	13,098	668	24,385	
Marburg	14	34	121	1,810	149	4,463	7	717	291	7,024	
Mareeba	5	19	6	59	1	27	...	...	12	105
Maroochy	71	186	71	737	11	277	2	193	155	1,393	
Maryborough	105	380	145	1,580	37	1,029	7	715	294	3,704	
Mitchell	3	11	13	168	14	452	11	1,126	41	1,757	
Mount Morgan	25	65	1	16	...	...	...	...	26	81
Mourilyan	13	52	73	880	51	1,656	17	4,277	154	6,865	
Muttaburra	1	5	1	7	...	...	...	...	2	12
Nanango	14	47	53	615	17	436	1	65	85	1,163	
Nerang	32	83	78	862	58	1,816	16	1,469	184	4,230	
Norman	4	17	...	...	...	...	...	...	4	17
Palmer	15	44	9	71	...	...	...	...	24	115
Ravenswood	17	44	3	23	...	...	...	...	20	67
Redcliffe	36	102	128	1,613	54	1,674	15	989	233	4,378	
Rockhampton	112	258	102	1,177	47	1,369	6	464	267	3,268	
Roma	7	16	32	442	26	801	25	2,002	90	3,261	
Rosewood	17	49	79	1,092	121	3,823	11	660	228	5,624	
St. George	16	92	13	85	1	22	...	...	30	199
St. Lawrence	4	9	6	82	1	26	...	...	11	117
Somerset	2	8	5	37	...	...	1	860	8	905
South Brisbane	84	227	105	1,189	31	917	5	348	225	2,661	
Springvale	9	25	8	93	1	26	1	80	19	224	
Stanthorpe	55	150	36	356	12	369	1	72	104	947	
Surat	5	19	3	36	...	...	...	...	8	55
Tambo	9	18	...	...	...	...	...	...	9	18
Taroom	21	65	6	78	1	59	...	...	28	202
Tenningering	10	25	...	...	1	25	...	...	11	60
Texas	26	85	22	232	7	204	4	282	59	803	
Thargomindah	5	14	...	...	...	...	...	...	5	14
Thornborough	19	52	8	80	1	32	...	...	28	164
Tiaro	34	103	104	1,258	54	1,560	11	1,489	203	4,410	
Toowoomba	369	1,061	404	4,834	331	10,256	148	20,016	1,252	36,167	
Townsville	23	71	21	214	1	20	...	...	45	305
Warwick	43	92	99	1,267	126	4,375	145	15,976	413	21,710	
Windorah	2	5	...	...	...	...	...	...	2	5
Winton	11	16	...	...	...	...	...	...	11	16
Woodford	25	66	39	385	4	117	...	...	68	568
Yeilba	20	65	48	533	17	539	4	272	89	1,409	
TOTALS	...	2,922	8,269	5,011	60,660	3,560	110,889	1,333	157,457	12,826	336,775

As sugar and wheat are the staple products of Queensland agriculture, it is not surprising to find that the comparatively large farms preponderate in the districts where wheat and sugar are principally cultivated. But it is a matter of regret that there is so great a tendency to farm one crop only, instead of adopting combined agriculture.

Last year the centesimal increase in the number of farms was 6·55, and in the area of land cultivated 12·53 per cent. Comparing the figures for the past two years by referring to the statement in the preceding Table H, it will be seen that in none of the groups was there a decline in the total acreage, and in only one—namely, that of 5 acres and under—in the number, showing that the average size of these very small cultivated areas is rising.

The centesimal increases for each group last year were as follow:—

Group.		Centesimal Increase in number of Farms.		Centesimal Increase in Area Cultivated.
5 acres and under	...	2 (decrease)	...	2
Above 5 and not exceeding 20 acres		3	...	5
Above 20 and not exceeding 50 acres		14	...	14
Above 50 acres	...	25	...	15
Total	...	7		13

Whilst the increase in area has been relatively about the same in the "20 to 50" and the "above 50" groups, yet the increase in the number of farms was considerably larger in the latter group.

The average size of the cultivation area in each group for the past five years was as follows:—

	5 Acres and under.	5 to 20 Acres.	20 to 50 Acres.	50 Acres and Upwards.	Total.
1892	...	2	12	31	142
1893	...	2	11	29	129
1894	...	3	12	31	125
1895	...	3	12	31	128
1896	...	3	12	31	118

Except the slight increase in mean area in the first group and in the total, the former of which has already been referred to, and the slight rise in the acreage of the total of cultivated holdings, but little change is to be noted in the average areas.

IRRIGATION.

Although the question of irrigation has never yet received in Queensland the attention its importance demands, yet it is satisfactory to observe an increase, in even a small degree, in the extent to which this important aid to agriculture is being adopted. The time has passed when it was necessary to emphasise the advantages to be derived from irrigation. In all parts of the world this has now been fully demonstrated, and in tropical and semi-tropical countries in particular its benefits are admitted.

The area of cultivated land irrigated each year since returns have been collected on the subject show, with one exception, an annual increase:—

Year.	Acres Irrigated.	Year.	Acres Irrigated.
1891 ...	3,869	1894 ...	5,846
1892 ...	3,840	1895 ...	6,447
1893 ...	5,287	1896 ...	8,368

The area irrigated in 1896 more than doubled the area so treated in 1892, and yet the former season was not so exceptionally dry in the localities where irrigation is carried on as to have especially induced the increase of the practice. This must rather have resulted from the benefits experienced from the artificial application of water to the soil.

The following statement shows the districts in which this aid to cultivation was adopted during 1896, and the area watered in each:—

I.

IRRIGATION.

Petty Sessions District in which situated.	Acres Irriga- ted.	Original Source of Water Supply.	Means Employed for Procure- ment and Utilisation.	Crops Treated.	Remarks by Irrigator.
Adavale ...	6	Blackwater River	Horse pump, drains ...	Vegetables.	
Ayr ...	5,078	Wells, river, artesian, and lagoons	Steam pumps, centrifugals, fixed and portable engines, open trenches and flumes, and by flooding	Sugar-cane, potatoes, and general crops	Ratoons do better when the surface of the ground is left unbroken during dry weather, when irrigation water is obtainable.
Barcaldine ...	137	Artesian ...	Steam pump, gravitation, drains	Oats, maize, wheat, vegetables, grasses.	
Banana ...	2	Dawson River ...	Windmill, drains ...	Fruit trees and general crops.	
Blackall ...	66	Barcoo River ...	Horse pump, gravitation, piping, trenches	Oats, maize, wheat, fruit trees, and vegetables.	
Bowen ...	146	Wells and creek ...	Steam pump, gravitation, windmill, piping, drains, flumes	Oats, maize, potatoes, fruit trees, and sugar-cane	Maize crop very good. Oats indifferent, the latter being watered too late. Irrigation profitable by using great economy.
Brisbane ...	11	Creek ...	Steam pump, windmill, pipes, and hose	Oats, cabbages, and fruit trees	
Cape River ...	16	Cape River and Creek	Horse pump, whip and barrel piping, trenches	Oranges, grapes, potatoes, and vegetables	Irrigation beneficial.
Cairns ...	3	Creek ...	Gravitation ...	Potatoes and coffee.	
Charters Towers ...	17	Wells ...	Steam pump, gravitation, pipes, and drains	Fruit trees and vegetables.	
Charleville ...	12	Warrego River ...	Steam pulsometer pump, trenches	Sorghum.	
Cleveland ...	4	Well ...	Windmill, pipes, and hose ...	Oranges.	
Cook ...	4	Spring ...	Gravitation, trenches ...	Maize.	
Croydon ...	11	Station Creek ...	Gravitation ...	Vegetables and fruit trees.	

I—continued.
IRRIGATION—continued.

Petty Sessions District in which situated.	Acres Irrigated.	Original Source of Water Supply.	Means Employed for Procurement and Utilisation.	Crops Treated.	Remarks by Irrigator.
Cunnamulla	29	Warrego River, artesian	Horse pump, gravitation, pipes, drains	Lucerne, fruit trees, and vegetables.	
Esk	25	Lockyer Creek	Steam pump, pipes	Lucerne	
Etheridge	13	River and well	Steam and horse pumps, piping, hose, and trenches	Potatoes and fruit trees.	Satisfactorily.
Herberton	12	Spring Creek	Turbine, gravitation, trenches	Maize, potatoes, vegetables, and fruits.	
Hughenden	89	Wells	Steam and horse pumps, drains	Potatoes, maize, sorghum, and oranges.	
Isisford	11	Barcoo River and Thornleigh Creek	Horse pump, whip and windlass, drains	Vegetables.	
Longreach	20	Thompson River and Gin Creek	Horse pump	Sorghum, vegetables, and fruit trees.	
Mackay	182	Pioneer River and Creek	Steam pump and windmill, gravitation, trenches	Sugar-cane.	
Muttaburra	11	Thompson River and lagoon	Horse pump, windmill, and drains	Potatoes, vegetables, and fruit trees.	
Norman	17	Lagoon	Centrifugal and horse pump, drains	Vegetables and oranges.	
Ravenswood	5	Well	Steam pump, piping	Fruit trees and grapes.	
Rockhampton	70	Creek and wells	Steam pump, windmill, piping, hose, gravitation, and drains	Lucerne, potatoes, vegetables, and fruit trees.	
St. George	42	Balonne River, wells, Wallam Creek, lagoons	Horse and steam pump, whip, windlass, hose, drains, and flooding	Oats, wheat, vegetables, and fruit trees.	
Springsure	2	Creek	Horse pump, gravitation, drains	Vegetables.	
Stanthorpe	116	Creek, spring	Gravitation, steam pump	Fruit trees and vegetables.	
Tambo	3	Barcoo River	Horse pump, whip, drains	Potatoes, onions, cabbages.	
Thargomindah	11	Bulloo River	Horse pump, windlass, drains	Fruit trees and vegetables.	
Tiaro	2	Lagoon	Steam pump, drains	Orange trees.	
Townsville	2,058	Ross River, creek, wells, lagoons	Steam and horse pumps, drains	Sugar-cane, fruit trees, and vegetables.	
Toowoomba	137	Condamine River, artesian	Steam pump, gravitation	Oats and lucerne.	
Total	8,368				

It will be observed from that table that the bulk of the irrigated land is returned from the two districts of Ayr and Townsville, and sugar-cane was the principal crop thus treated. These two districts, which are contiguous, contributed 7,136 acres, or 85 per cent. of the total area included in the statement. The adjoining districts of Bowen and Mackay together comprised an additional 328 acres, mainly sugar land. Other irrigated areas of considerable extent are returned from—Barcaldine, 137 acres; Toowoomba, 137 acres; Stanthorpe, 116 acres; Hughenden, 89 acres; Rockhampton, 70 acres; and Blackall, 66 acres. At Harrisville, where 100 acres were irrigated in 1895, the plant is still *in situ*, but was idle during 1896, irrigation not being required during that year.

Rivers, creeks, and lagoons form the most general source of water supply used for this purpose, although wells and artesian bores are utilised in many localities. The area cultivated at Barcaldine is entirely watered from a bore sunk at that place, and this source of supply will no doubt be largely applied in the future over much of the Western country. The water from some of the artesian bores is, however, heavily charged with mineral substances, which in some instances may preclude its use for the furtherance of cultivation, as being detrimental to vegetable life. The advantage of artesian water when the pressure is sufficient, which is generally the case, is the opportunity afforded of distribution by direct gravitation. Water drawn from other sources for irrigation purposes—except in one or two instances—has to be raised to reservoirs by artificial methods to secure a head for distribution. The formation of the reservoir necessary for this purpose is in itself a more or less costly matter, as is also the machinery required for raising the water; in addition to which the operation of working the latter is moreover a constant source of expense, so that few agriculturists have sufficient means to embark in an enterprise of this kind except on a very small scale.

Distribution is generally secured by means of trenches, though pipes and hose are also used for the purpose. A perusal of the table will show the variety of means employed by agriculturists in raising the water.

Although sugar-cane is at present the principal crop irrigated, and occupies the bulk of the area thus treated, yet a great variety of other products mentioned in the fifth column of the table are grown with the assistance of moisture artificially applied, and, judging from the reports received by me, with unvarying success.

Although the seasons of the past few years have been sufficiently favourable to keep the question of irrigation of cultivated areas in the background, yet the necessity of adopting comprehensive systems of irrigation cannot fail to commend itself to the consideration of the Agricultural Department. When the question really assumes a practical shape the experience acquired on the subject by experimentalists during the past few years will prove of great value, as it will furnish data on several points—as to the quantity of water needed for a given area, as to the amount of evaporation, &c., &c., circumstances which differ with every locality and climate.

Detailed information respecting the agricultural operations of the year can be obtained by reference to Tables No. VIII. to XV. inclusive, which furnish minute particulars respecting each crop, and also as to the extent of farming in each district of the colony.

Condensed results obtained from each crop in each geographical district are supplied in the following table:—

J.
AVERAGE YIELD OF CROPS.

Division.	Description.	GRAIN CROPS.						POTATOES.		Sugar to Acres Crushed.	Cotton.	Arrow- root.	Tobacco, Dried Leaf.	Coffee.	Hay of all Kinds.	Grapes.	Bananas.	Pine- apples.	Oranges.		
		Wheat.	Oats.	Barley.	Maize.	Rice.	Rye.	English.	Sweet.												
SOUTHERN	East of Main Range ...	22.17	17.49	19.74	26.35	23.11	20.56	2.31	5.02	1.61	514.61	2,277.51	4.38	130.00	2.50	2,018.95	1,311.43	435.43	613.14		
	West of Main Range ...	16.64	17.13	17.06	25.81	1.00	22.55	2.65	2.04	...	...	...	8.82	...	1.33	3,611.33	300.00	333.33	1,470.11
	Total Southern ...	16.79	17.15	17.25	26.13	21.95	21.77	2.40	4.93	1.61	514.61	2,277.51	8.77	130.00	1.97	2,854.31	1,309.79	434.92	700.57		
CENTRAL	East of Main Range ...	8.10	...	15.00	21.26	1.64	3.52	2.25	5.00	Nil	1.53	1,981.32	623.86	237.85	661.47	
	West of Main Range ...	3.50	Nil	...	9.50	...	...	2.38	1.62	...	...	...	...	...	1.07	2,561.73	Nil	...	150.00
	Total Central ...	6.79	Nil	15.00	20.70	1.77	3.42	2.25	5.00	Nil	1.51	2,115.26	603.07	237.85	629.50	
NORTHERN	East of Main Range	20.00	8.00	33.56	35.98	17.27	3.01	4.02	1.40	6.00	25.00	1.63	67.80	2.18	1,001.33	4,844.37	211.59	993.27
	West of Main Range	35.94	21.00	10.00	2.54	3.39	...	Nil	1,680.00	1.00	...	2.04	1,058.03	1,861.28	321.31	455.98
	Total Northern	20.00	8.00	34.76	34.61	16.67	2.78	3.84	1.40	5.00	1,128.33	1.45	67.80	2.09	1,040.31	4,800.73	230.00	889.18
TOTAL COLONY ...		16.78	17.10	17.24	26.49	34.21	21.59	2.40	4.57	1.51	503.69	2,266.35	8.68	70.34	1.95	2,780.96	3,810.39	381.33	753.20		

If some of the items furnished in this table are compared with the similar ones for 1895, it will be seen at once how great an improvement was manifest with respect to grain crops last year. In 1895 the six crops quoted gave a mean average return to each acre of 16·41 bushels, whilst the like return for 1896 was 22·23 bushels. The yield in 1895 from the crops referred to was in no case as good as that for 1896, although the yield of rye for the latter year was but little better than in 1895—namely, 21·59 bushels and 20·64 bushels respectively. With regard to wheat, oats, barley, and rye, the bulk of the production and the best average returns are obtained in the Southern Division, whilst the Northern areas show better averages from maize and rice. The English potato is chiefly cultivated in the Southern Division east of the Range—69 per cent. of the total area for 1896 was in the locality mentioned; the average yield, however, was better on the Downs. A more satisfactory result was obtained from a small area in the Northern Division in the coast districts. The sweet potato is also chiefly cultivated in the South, and it was there that the best yield was obtained last year—namely, 5·02 tons to each acre; whilst the average for the whole colony was 4·57 tons.

Referring to the sugar crop it is seen that, with the exception of the fine return of 2 $\frac{1}{4}$ tons to each acre obtained from the small area crushed in the Central Division, the best yield was returned from the South—namely, 1·61 tons to each acre; that for the North being 1·40; and for the whole colony 1·51.

The cultivation of cotton is practically confined to the eastern half of the Southern Division.

WHEAT.—Owing to the want of sufficient rainfall at the usual time of planting in 1896 in several districts, the prospects for this cereal were not promising during the early stage of growth of the crop. It then appeared as if the experience of 1895 was to be repeated, consequently the results were looked forward to as likely to prove unsatisfactory. Fortunately, these anticipations were not realised, and although the season was generally a dry one, yet sufficient rain fell later on in the year to ensure a most satisfactory crop.

The area sown in 1896 exceeded that sown in 1895 by 9,292 acres. The grain produced last year—601,254 bushels—gave an average of 17·34 bushels per acre on the area reaped, whilst the mean return for the previous year was 9·55 bushels only. The great improvement in the results for 1896 did not consist in this increased average only, but in the additional fact that, of the 38,942 acres sown, 34,670 acres were reaped for grain, or a proportion of 89 per cent. of the area sown. Compared with this it will be seen that in 1895 only 44 per cent. of the total area planted arrived at its legitimate fruition.

The number of persons who grew wheat last year was 33 per cent. greater than in the preceding one. This is ascertained from the fact that there were 2,051 wheat schedules tabulated in 1896, and 1,493 only in 1895, an increase of 558.

The following table shows the annual results obtained from the wheat crop during the past five years:—

K.

Year.	Total Area Sown.	Reaped for Grain.			Mown for Hay.			Cut for Green Food.	Unproductive.
		Acres.	Produce.	Average Per Acre.	Acres.	Produce.	Average Per Acre.		
1892	33,332	30,907	Bushels.	Bushels.	1,423	Tons.	Tons.	Acres.	Acres.
1893	31,750	28,411	462,583	14·97	2,177	1·53	167	835	582
1894	34,387	27,991	413,094	14·54	2,417	2,820	1·17	340	1,006
1895	29,650	12,950	545,185	19·48	4,643	6,362	1·37	747	1,216
1896	38,942	34,670	123,630	9·55	1,344	1,428	1·06	14,140	1,269
			601,254	17·34	1,845	1,689	0·92	1,269	1,158

From this it is seen that in 1896 the acreage planted, the acreage reaped, and the grain produced were all in excess of the returns for any other year of the quinquennium, and indeed for any year in the colony's history. The average yield of wheat grain for this year has, however, been exceeded on several occasions. In 1887 it was 22·10 bushels; in 1890, 20·02 bushels; in 1891, 20·32 bushels; and in 1894, 18·80 bushels, as against 16·78 in 1896.

Table No. XII. in the Appendix furnishes the fullest information respecting the cultivation of this cereal last year, giving detailed results for each district in which wheat was grown.

A prominent feature in connection with the crop for 1896 was the very small area attacked by rust. Only 585 acres, or one and a-half per cent. of the total area planted, was returned as so affected. Of the above-mentioned area the crop on 506 acres was not so badly diseased as to necessitate its being cut before maturity, and an average yield of 6 $\frac{1}{3}$ bushels of grain was obtained. The remaining 79 acres of the rusted area were mown for hay, and returned very nearly a ton to each acre.

Although there is apparently a growing tendency on the part of farmers east of the Great Dividing Range to cultivate wheat as one of their regular crops, and the quantity there produced in 1896 was six or seven times greater than in 1895, yet the great bulk of the crop of grain still comes from the areas sown west of that range. In the Darling Downs Districts—using that term in its widest sense—85 per cent. of the total area was planted, and the outcome was 97 per cent. of the total production. The more westerly districts of Yeulba, Roma, and Mitchell together contributed 4,391 acres and 16,268 bushels to the wheat production of 1896; and 3,194 acres and 10,273 bushels to that of 1895; an increase of 1,197 or 37 per cent. in acreage, and of 5,995 bushels or 58 per cent. in produce.

A decline took place in the area under wheat in the Central Division, where there were 70 acres sown in 1895, and only 47 acres last year; nor were the results obtained at all satisfactory, for whereas an average yield of 32 bushels per acre was obtained in the former year, the mean return in the latter fell a little short of 9 bushels. It is a noticeable fact that in neither season was a single acre of this area returned as affected by rust. Owing to the immunity of the crop from rust in those districts, and the good return obtained in 1895, it is possible that a greatly increased area will be devoted to this crop in the vicinity of Springsure and Emerald during the current year.

Reference has already been made to the very satisfactory nature of the return per acre obtained over the whole colony; but perhaps an even more striking feature of last season's crop was the very high percentage obtained by some farmers and in some localities. The best returns were undoubtedly

obtained in the districts comprised in the West Moreton area, although the results obtained on the Downs, especially the southern portion, were most satisfactory. In the Southern Division the average for the group of districts east of the Range was 22·17 bushels per acre, and for that to the west of it 16·64 bushels per acre; but if the latter be divided into two locations, taking a north and south line just west of Dalby, the easterly portion—and it is here that the bulk of the wheat is grown—gave an even more favourable return—namely, 17·56 bushels to each acre. The very poor return of 4·88 bushels was obtained from the Western area. As this only includes a limited acreage its effect on the whole average was not very pronounced—only sufficient to make the difference of 0·92 bushels to each acre.

Allusion has been made to some cases in which the yields obtained were exceptionally good; thus instances are noticed in which upwards of 40 bushels per acre were returned, and that from areas of some extent. On the eastern side of the Range there were four districts in which the area reaped exceeded 100 acres—namely, Gatton, Laidley, Crow's Nest, and Nanango; in these the average yields obtained were 24·37 bushels, 23·09 bushels, 18·66 bushels, and 18·63 bushels each respectively. In districts over the Range there were several in which upwards of 1,000 acres were planted—namely, Toowoomba, Allora, Warwick, Killarney, Highfields, and Roma; and the average yields in the districts named were 13·71, 18·57, 21·60, 23·66, 18·19, and 5·05 per acre.

The mean average return usually obtained from wheat in Australia is low, the average for the last ten years being about 10 bushels; and even this average, low as it is, would be still lower but for the returns from New Zealand and Tasmania, which are generally considerably greater than those for the continental colonies. Quoting from Coghlan's "Seven Colonies," the averages for the ten years ended 1894 were—New South Wales, 12·0; Victoria, 9·9; Queensland, 14·9; South Australia, 6·8; Western Australia, 11·7; Tasmania, 17·4; and New Zealand, 23·7. According to Mulhall, the average yields per acre of some of the chief wheat countries of the world are as follow:—United Kingdom, 28; France, 18; Germany, 22; Russia, 8; Austria, 16; Italy, 12; Spain, 12; United States, 12; India, 10; so that the Queensland crop for 1896 will compare favourably with that of most of the countries mentioned, and is considerably in excess of the results obtained in several of them.

Upwards of £500,000 was sent out of the country during 1896 for the purchase of breadstuffs, so that a wide field for wheat production is still open before our farmers will be called upon to go outside the colony for a market.

Imports for 1896—

Wheat	... ...	863,469 bushels, value	... ...	£179,956
Flour	... ...	32,996 tons,	... ...	£370,419
Biscuits	... ...	148,137 lb.,	... ...	£5,085
£555,460				

As the export from this colony in 1896 of goods included under the above headings was practically nominal, the value aggregating only £1,291, the above figures may be accepted as the measure of the market still available to meet the demand for home consumption.

Reducing the flour to wheat value, and ignoring the biscuits as insignificant in quantity, the consumption of wheat last year was 3,048,531 bushels, of which 601,254 bushels were the produce of the colony, or 20 per cent. of the total consumption; leaving 2,447,277 bushels to be supplied before the local production would equal the local demand. Taking this at the mean average yield for the last ten years—namely, 15 bushels to each acre—it would require an addition of 163,152 acres to the wheat-fields of the colony before the question of export would have to be considered.

OATS.—The area planted with oats last year was more than twice as great as that for 1895, and was considerably in excess of the acreage for 1894. The return obtained was also three times greater than in 1895, but not so good an average crop was secured as in 1894, when from an area of 404 acres less in extent nearly as large a return was obtained as in 1896.

Particulars of this crop for the past two years are given in the subjoined table:—

L.

Year.	Area for Grain.	Produce.	Average Produce per Acre.
			Acres.
1895	922	10,887	11·81
1896	1,881	32,181	17·10
Increase in 1896	959	21,294	5·29
Decrease in 1896	...	...	...

This cereal is grown to a sufficient extent and with such results as to preclude the idea that the crop is not suited to the climate. At the same time so much is imported either as grain or in the form of oatmeal as to create surprise that farmers in the colony do not extend their operations in this direction, particularly as there is a heavy duty in their favour—equivalent to about 25 per cent.—that is, accepting the import value as the basis—namely, 8d. per bushel on the grain, and 4s. per cwt. on the meal: the quantity imported during 1896 was 88,484 bushels of grain valued at £11,556, and 7,439 cwt. of oatmeal valued at £6,414; in all about 109,000 bushels, or more than three times as much as was grown and produced in the colony during the same period.

Oats for grain may be said to be grown entirely in the Southern Division, and of these nearly all—namely, 93 per cent.—in the Western half of it. The principal wheat districts of Toowoomba, Allora, and Warwick are those in which the bulk of the cultivation of this crop took place, the acreage returned from these three districts aggregating 1,530 acres.

BARLEY.—Attempts have been frequently made, and are still continued to some extent, to cultivate the varieties of barley best suited for malting purposes, but apparently with indifferent success. Although malting floors have been established, and a little work carried on during most seasons, yet the output of locally produced malt has been in no way commensurate with the total consumption of that article. Barley meal not being in practical use here as a breadstuff, unless barley fit for malting is grown there is necessarily but little use for the grain, and consequently there is but little increase in the extent to which the crop is cultivated from year to year.

The area planted and the results for the past two years are shown in the following table:—

M.

Year.			Area for Grain.	Produce.	Average Produce per Acre.
1895	...	...	Acres. 721	Bushels. 7,756	Bushels. 10·76
1896	...	...	1,122	19,340	17·24
Increase in 1896	...	...	401	11,584	6·48
Decrease in 1896	...	...	...	...	...

It will be seen that there is considerable fluctuation in the area sown with barley. Thus in 1896 the area under this crop was greater than that in the preceding year by 56 per cent., but in 1895 the acreage declined by much more than an equal amount. The average yield also varies considerably. Thus in 1894, which was one of the best recorded, it was 27 bushels per acre, whilst in 1896 the average was only 17 bushels. The production last year was 19,340 bushels, which was but little more than half the quantity required for consumption, as 18,295 bushels were imported during the year, valued at £3,474—that is equal to about 3s. 10d. per bushel. As barley carries a duty of 9d. per bushel, it is to be regretted that the crop does not prove profitable to farmers so as to enable them to grow sufficient of the grain to at least supply the home demand. In addition to the amount of barley imported as grain in 1896 there were 147,474 bushels of malt imported, valued at £47,676, upon which a duty of 4s. 6d. per bushel, equal to £33,181, to which extent the Queensland producer is protected.

MAIZE.—Of the 37,000 acres added to the cultivated area of the colony in 1896, 15,000 acres, or approaching one-half, was occupied by maize. The land under this cereal comprises 34 per cent. of the total area under plough, and the results obtained were most satisfactory, the average return—26·49 bushels to each acre—having only once been exceeded for many years past—namely, since 1883. In 1891 the high average of 30·30 bushels was recorded, a return unequalled during the eleven previous years.

Details respecting this crop for the past two years are given in the following statement:—

N.

Year.			Grain.	Average Produce per Acre.
1895	...	...	Acres. 100,481	Bushels. 2,391,378
1896	...	...	115,715	3,065,333
Increase in 1896	...	...	15,234	673,955
Decrease in 1896	...	...	...	...

As this grain is not utilised to any extent as a breadstuff, it is surprising that there should be such a demand for it for other purposes as to induce so large a share of attention being paid to it by agriculturists. It is, however, evident that the demand for the corn is genuine, and is not greatly induced by the low prices caused by an excessive supply of the home produced article, because immediately the local supply declines, or the corn is held back by farmers in the hope of increased prices, the deficiency is to a large extent made good by increased imports, although in the face of an import duty of 8d. per bushel. In ordinary seasons the amount imported is inconsiderable. For instance, with a good crop last year, 13,498 bushels only, valued at £2,169, entered the colony. But, in addition to this, maize meal and cornflour to the value of £4,823 were also imported.

In this colony the cultivation of maize is more generally distributed than that of any other crop, notwithstanding which the great bulk of the production is confined to a comparatively few districts.

The following table furnishes a full comparison of the past two seasons' crops in districts in which the area planted exceeded 1,000 acres:—

O.

Petty Sessions District.	Area Planted for Grain.			Yield of Grain.			Average Yield per Acre.		
	In 1895.	In 1896.	Increase * or Decrease †	In 1895.	In 1896.	Increase * or Decrease †	In 1895.	In 1896.	Increase * or Decrease †
	Acres.	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Laidley ...	9,274	10,702	* 1,428	183,378	254,804	* 71,426	19·77	23·81	* 4·04
Toowoomba ...	7,897	10,403	* 2,506	173,179	260,613	* 87,434	21·93	25·05	* 3·12
Warwick ...	7,684	10,206	* 2,522	217,137	263,354	* 46,217	28·26	25·80	+ 2·46
Allora ...	7,197	9,910	* 2,713	146,302	253,326	* 107,024	20·33	25·56	* 5·23
Gatton ...	8,185	8,814	* 629	165,029	213,116	* 48,087	20·16	24·18	* 4·02
Dugandan ...	6,916	7,300	* 384	148,553	203,538	* 54,985	21·48	27·88	* 6·40
Highfields ...	5,375	5,470	* 95	172,274	169,261	+ 3,013	32·05	30·94	+ 1·11
Marburg ...	4,725	5,150	* 425	95,765	112,937	* 17,172	20·27	21·93	* 1·66
Killarney ...	2,612	4,663	* 2,051	78,815	117,170	* 38,355	30·17	25·13	+ 5·04
Harrisville ...	4,658	3,915	+ 743	103,695	116,229	* 12,534	22·26	29·69	* 7·43
Rosewood ...	4,907	3,894	+ 1,013	90,626	85,200	+ 5,426	18·47	21·88	* 3·41
Ipswich ...	2,619	3,348	* 729	57,528	79,876	* 22,348	21·97	23·86	* 1·89
Beaudesert ...	2,527	2,587	* 60	71,238	88,917	* 17,679	28·19	34·37	* 6·18
Redcliffe ...	2,112	2,485	* 373	51,208	72,241	* 21,033	24·25	29·07	* 4·82
Crow's Nest ...	1,621	2,427	* 806	48,595	76,304	* 27,709	29·98	31·44	* 1·46
Herberton ...	1,590	2,110	* 520	46,667	85,527	* 38,860	29·35	40·53	* 11·18
Esk ...	2,033	2,076	* 43	51,205	49,741	+ 1,464	25·19	23·96	+ 1·23
Nerang ...	1,838	1,790	+ 48	55,549	63,289	* 7,740	30·22	35·36	* 5·14
Logan ...	1,370	1,651	* 281	29,149	41,105	* 11,956	21·28	24·90	* 3·62
Dalby ...	884	1,334	* 450	13,174	35,494	* 22,320	14·90	26·61	* 11·71
Tiaro ...	1,563	1,333	+ 235	44,632	40,728	+ 3,904	28·46	30·55	* 2·09
Bundaberg ...	901	1,316	* 415	30,774	32,308	* 1,534	34·16	24·55	+ 9·61
Gympie ...	1,107	1,210	* 103	35,384	39,044	* 3,660	31·96	32·27	* 0·31
Cairns ...	1,098	1,142	* 44	44,026	56,058	* 12,032	40·10	49·09	* 8·99

The West Moreton and Darling Downs areas include the districts in which this crop is grown to the greatest extent. Twelve districts in these localities contributed 72 per cent. of the total acreage, and 69 per cent. of the total production.

Although perhaps not a very profitable crop, yet it is one which requires but little cultivation, and to which, except in very dry seasons, but small risk is attached. It also gives a quick return, and can almost invariably be disposed of at a moment's notice and for cash—all important elements to a farmer, who is frequently working upon a very limited capital. Notwithstanding the frequent complaints of very low prices, the crop evidently pays to cultivate, for the same districts year after year show expanding areas planted with it. In 1895 there were seven districts in which 5,000 acres and upwards were planted with maize, but in no instance did the area reach 10,000 acres. The number of districts in 1896 which returned upwards of 5,000 acres was eight, and in three of them over 10,000 acres were planted with this cereal. In only four districts of any importance was the acreage of 1896 below that of the previous year, and in only one instance did the decrease reach 1,000 acres. In the twenty-four leading districts, particulars concerning which are recorded in Table O, the lowest average yield returned was 21·88 bushels, which was in Rosewood; whilst the highest yield was 49·09 bushels in Cairns. Herberton, which returned 40·53 bushels, was the only other district in which the yield exceeded 40 bushels per acre; but in six other districts average yields exceeding 30 bushels were secured. The returns from the crop were not quite so satisfactory in the districts where the largest areas were planted compared with many in which it was cultivated to a more limited extent.

Local causes have frequently operated to make a marked difference in the returns from districts closely situated to one another. Thus, in West Moreton District, whilst the returns from Harrisville and Dugandan averaged 28 to 29 bushels per acre, the neighbouring districts of Marburg and Rosewood averaged only 21 to 22 bushels. Again, Highfields and Crow's Nest gave 31 bushels, whilst the districts on either side—namely, Toowoomba and Esk—only yielded 24 to 25 bushels. Three districts in the southern portion of East Moreton showed the following average per acre:—Logan, 24·90; Beaudesert, 34·37; and Nerang, 35·36. The districts included in the Southern Downs—Warwick, Allora, and Killarney—each averaged about 25½ bushels in 1896, thus proving an exception; but then they varied greatly in 1895, giving returns of—Warwick, 28·26 bushels; Allora, 20·33 bushels; and Killarney, 30·17 bushels.

Comparisons of yields between certain districts, based upon annual figures, are necessarily an uncertain basis on which to form ideas as to the relative prolific nature of such localities, because in short-period crops, such as maize, partial showers or even a chance thunderstorm at a critical period in the growth of the crop may make all the difference between a good yield and an indifferent one.

The mean average returns obtained in principal districts during two five-year periods are compared with the average for last year in the following table:—

P.

Police District.	Petty Sessions District.	Average Yield per Acre.		
		Five Years ended 1890.	Five Years ended 1895.	Year 1896.
Allora	Allora	Bushels. 16·00	Bushels. 20·34	21·08
Brisbane	Brisbane	22·14	23·58	22·60
Bundaberg	Bundaberg	30·59	35·50	34·06
Cairns	Gin Gin	40·75	34·37	34·77
Douglas	Douglas	44·23	31·09	30·69
Gatton	Gatton	19·22	21·61	21·17
Gympie	Gympie	29·17	32·55	32·44
Highfields	Highfields	21·92	28·84	28·61
Ipswich	Ipswich	22·96	20·10	19·57
Logan	Beaudesert	20·93	27·18	27·34
Marburg	Logan	16·84	21·68	19·50
Maryborough	Marburg	26·58	27·50	27·04
Normanby	Rosewood	19·55	24·05	23·77
Tiaro	Maryborough	27·28	29·33	27·07
Toowoomba	Dugandan	19·24	24·18	23·48
Warwick	Harrisville	23·57	31·85	29·23
	Tiaro			
	Toowoomba			
	Killarney			
	Warwick			

The return for the five years ended 1895 were much better than those for the preceding quinquennial period. In 1889 the average yield for the whole colony was 17·84 bushels, whilst in 1891 it was 30·30 bushels. These diverging averages falling in the different quinquenniums would, of course, considerably affect the mean averages of each, but the divergences in those years alone would not account for the differences in the averages.

RICE (Paddy).—It does not appear as if the cultivation of this cereal is destined, for the present at least, to receive any serious attention in this colony.

During the past ten years the returns obtained have, with one exception, been at least satisfactory, whilst on some occasions really excellent results have been secured; thus eleven years ago—in 1886—an average yield of 66·44 bushels was obtained. Of course with the price ruling for labour in Queensland the cultivation of rice cannot be profitably conducted in the same manner as adopted in China and Japan. There the seed is mostly sown in beds and the plants afterwards dibbled out into the wet field. The after cultivation is entirely carried on with the hand hoe. In the United States rice is grown with the aid of labour-saving implements, and these of course can only be used in places where provision has been made by which the water necessary to its cultivation can be applied to and diverted from the land at will, so that at the periods required for ploughing, planting, and reaping a dry surface can be secured, and the most modern appliances for cultivation and sowing the crop put to use.

An interview with a resident from Cairns was recently published in the Brisbane *Courier*. From the information then afforded it would appear that there is now established at Cairns an excellent mill for the conversion of paddy into the rice of commerce, but that the supply of grain was not more than sufficient to enable the mill to keep quarter time. It was also stated that there had recently been great improvement in the seed used, and that a variety had now been obtained—the bearded or spiked Java—which could be grown equally well on wet or dry ground. It could be sown broadcast, was most prolific, 30 cwt. having been returned from 100 lb. of seed; it would stand for months when ripe without falling or shedding its grain, and was moreover plump and fine-flavoured. It had been recognised by an expert as a variety much in favour in Burmah. Considerable quantities of this seed have been distributed, and consequently an extension of rice culture in the Cairns district is expected during the present season.

The particulars respecting the rice crop are shown in the following table:—

Q.

	Year.	Acres.	Bushels.	Average Bushels.
1892	...	1,113	33,380	29.99
1893	...	789	32,043	40.61
1894	...	650	24,866	38.26
1895	...	716	19,245	26.88
1896	...	600	20,528	34.21

Although there was a smaller area planted in 1896 than in 1895, yet, as is frequently the case, a larger return was obtained from the less area. For whilst in 1895 the average yield of paddy was 26.88 bushels per acre, last year a return of 34.21 was obtained. Cairns is the centre of rice cultivation, more than half the total area cultivated being situated in that district.

In the following table the districts where rice was grown last year are shown, arranged geographically:—

R.

District.	Position in the Colony.	Area Planted.	Quantity Produced.	Average Yield per Acre.
Cairns	Northern Division, East of Coast Range	346	14,385	41.58
Cook	" " "	79	2,744	34.73
Douglas	" " "	88	1,525	17.33
Mackay	" " "	11	314	28.55
Somerset	" " "	4	30	7.50
Croydon	" " West of Coast Range	8	15	1.87
Herberton	" " "	44	1,068	24.27
Thornborough	" " "	1	30	30.00
Brisbane	Southern Division, East of Main Range	1	2	2.00
Dugandan	" " "	1	1	1.00
Gatton	" " "	1	2	2.00
Logan	" " "	13	411	31.62
Nanango	" " "	2	...	...
Warwick	" " West of Main Range	1	1	1.00
TOTAL	...	600	20,528	34.21

From the foregoing statement it will be seen that the cultivation of rice, with a few very unimportant exceptions, is confined to the Northern portion of the colony, and there chiefly to the coast districts.

If there were not plenty of evidence that this cereal flourishes in countries possessing a climate similar to that of Southern Queensland, the averages frequently obtained from small areas in that portion of the colony would show the suitability of both soil and climate for its successful production. There are no doubt many localities where, by a comparatively small expenditure, the adoption of the American system of cultivation could be effected, and thus enable a sufficiency of this cereal to be grown, at least to supply the requirements of the home market.

There were 7,448,761 lb. of rice imported during 1896, valued at £42,633, which may be taken as representing 12,066,993 lb., or 215,482 bushels of paddy, the production of which, on the basis of the yield obtained from the crop for 1896, would involve the cultivation of 6,299 acres of land. Rice carries an import duty of 1d. per lb., which is equivalent to 2s. 11d. per bushel on paddy, which on the crop for 1896 would be equal to at least £4 19s. per acre.

RYE.—This grain is not greatly in favour as a cereal crop, although cultivated to some extent for hay and green fodder, which itself necessitates the raising of a certain amount for seed purposes.

The following statement gives particulars respecting the rye crop reaped for grain for the past five years:—

Year.	Acres.	Yield, Bushels.	Average per Acre, Bushels.
1892	360	8,001	22.22
1893	496	9,479	19.11
1894	283	5,251	18.55
1895	202	4,169	20.64
1896	345	7,449	21.59

Of the 7,449 bushels obtained probably nearly one-third would be required for seed, leaving but a small quantity for disposal. The greater proportion of this is ground into meal and used as a breadstuff, although a certain quantity is utilised as food for poultry.

ENGLISH POTATO.—Some strange inconsistencies are to be noticed with respect to the importation of this tuber. For instance, although the acreage and the production during 1894 were the largest ever recorded, and prices ruling were below the cost of digging and marketing, and that, too, from places within fifty miles of Brisbane, yet potatoes to the value of £38,000 were at the same time imported; whilst in the following year, with a production amounting to but little more than two-thirds of that for 1894, the imports fell short by £4,000 of those for the last-named year. In 1896 there was a smaller area planted with the English potato than for any year since 1890—namely, 7,672 acres—which was 1,568 acres less than in 1895. The average return obtained, however, was better in the former year than in 1895, the produce from the smaller acreage in 1896 being only a little more than 500 tons short of that recorded in the previous year. The mean yield for 1896—namely, 2·40 tons—was exceeded on three occasions during the decennium. In 1891 it amounted to 2·73 tons; in 1894, 2·68; and in 1892, 2·41 tons. The imports for last year totalled 19,271 tons, valued at £82,328, and as the production for the year was only 18,451 tons, it follows that rather more than half the consumption of potatoes was provided by foreign growers, in the face of an import duty of 15s. per ton.

It has been noted for some years past that the use of the English potato seems to have declined, and it has been suggested that this is largely due to the views now held by many medical men as to its effects in cases of dyspepsia. There are, however, other uses to which the vegetable can be turned as well as for purposes of food—for instance, it is largely used for the manufacture of starch, glucose, and spirit; but, besides, it has recently been discovered that by treatment with a certain kind of acid the potato can be converted into an excellent substitute for ivory specially suited for the manufacture of buttons, and it is thought in view of the exhaustion of the supply of true ivory—which is not unlikely—that in the potato may be found a cheap and efficient competitor with some of the other substances now in use for the production of the artificial article.

SWEET POTATO.—This root is not used to any great extent as a vegetable by town residents, and in the bush it is principally consumed by South Sea Islanders employed on the sugar plantations of the colony. It is also largely used as an article of food for cattle. The area planted with this tuber last year—3,131 acres—exceeded all previous records, although the average yield obtained—4·57 tons per acre—was below that of any previous year except that for 1893, and brought the production of 14,322 tons down to but little more than was obtained from the 2,736 acres planted in 1895.

COTTON.—The various attempts made to establish the cultivation of this plant as one of the industries of the colony have not hitherto met with great success. Between 1867 and 1874, under the stimulus of a heavy bonus, 10,023,585 lb. of cotton were grown and exported. The possibility of the establishment of a cotton factory to utilise the raw product within the colony was not even considered at that time. The population was very limited, and the only idea was to raise cotton for shipment to England, and thus share in furnishing the supply of the raw material to the cotton factories of Lancashire. To this end statutory authority was obtained for granting a State bonus on every bale of cotton exported. Later on it was decided to abolish this protection, and very rapidly cotton ceased to be cultivated to any but the most trivial extent, indeed during two years—1887-8—not one acre was planted throughout the colony. Then the establishment of the manufacture of cotton fabrics came to the front, and again the State was looked to for aid, and Parliament sanctioned the payment of a sum of money to the first factory which turned out a quantity of stuff. With this inducement a company was formed and a factory established at Ipswich, and with the prospect of a market at their doors the farmers of West Moreton once again included cotton among their crops. The results of this revival in the cultivation of this plant during the past eight years are shown in the following statement:—

	Acres.			Produce. lb.	Average yield. lb.
1889	...	1	...	...	7
1890	...	16	...	5,315	332·19
1891	...	90	...	48,746	541·62
1892	...	717	...	212,370	296·19
1893	...	191	...	29,353	153·68
1894	...	100	...	54,801	548·01
1895	...	494	...	269,110	544·76
1896	...	280	...	141,032	505·69

From these figures it does not appear, even with the stimulus of a local market, that the cultivation of cotton is likely to assume any important proportion. Although it is likely that a man with a large family who can assist him in the work of harvesting, by planting an area suitable to his requirements, may still find the crop a profitable one, yet any attempt to form a plantation and to employ hired labour in picking, in the face of the labour conditions in this colony, is not likely to be again attempted.

SUGAR.—Altogether the sugar industry made considerable progress during 1896, yet this was marked more by the increased output than by the area planted.

There were 5,846 acres added to the canefields of the colony, and the area crushed last year exceeded that for 1895 by 10,869 acres; whilst there were 14,519 tons of sugar manufactured in 1896 in excess of the production of the preceding year.

Unfortunately, the weather experienced during the year under review in several of the sugar districts was not of the most favourable nature, and consequently the average return per acre obtained for the whole colony was slightly below that of the previous year, although the return for 1895 was barely equal to the mean production for the current decade. The effects of both drought and frost were severely felt, whilst the beetle plague was likewise productive of a considerable amount of loss. The effects of the frost were most felt in the Maryborough and Bundaberg districts, and the loss from insect pests proved worst at Mackay.

A comparison of the sugar crops for the two past two years is afforded by the following table :—

S.

Year.	Area under Cane for Sugar.		Area Crushed.	Total Yield.	Average Yield per Acre.
	Acres.	Acres.			
1895	77,247	55,771	86,255	1·55	
1896	83,093	66,640	100,774	1·51	
Increase in 1896	5,846	10,869	14,519	...	
Decrease in 1896 ... ...	...	...	...	...	0·04

It will be observed that great strides have been made in recent years both in the cultivation of cane and in the manufacture of sugar therefrom, whereby not only has the quality of the article been greatly improved, but also the average yield obtained from a given area considerably increased. Taking the mean average returns for the first and last decades comprised in the last twenty years, it is found that each acre returned about 17 per cent. more sugar during the latter than during the former period. This would itself be an important factor in determining the relative profitable nature of the industry; but added to this is the fact that the increased result has in most cases been obtained at a greatly reduced cost.

Important as have been the changes effected, yet it would be unwise to assume that further improvement is not to be hoped for; and as Queensland will have to look for markets further afield, where the competition of bounty-fed beet sugars will have to be met, the progress made in the past few years should be only an incentive to further efforts for advancement. It seems that the great improvement thus obtained has been mostly connected with the manufacture of sugar, and it is to be hoped that, in addition to further effort in the same direction, special attention will now be directed to the canefields, with a view to both increased and even more economical production of the cane.

Careful and thorough cultivation of cane under ordinary circumstances will always yield a suitable reward, but that alone will be insufficient, except special attention be directed to the prevention and cure of the many plagues and diseases to which sugar-cane is subject. A wide field is open in this direction to scientists and others to come to the assistance of the unfortunate sugar-grower, who is feebly battling against these scourges. Fortunately, although the loss which has resulted to Queensland planters both from the ravages of insects and disease has been confined to certain places, and the canefields of the colony have not up to the present suffered in these respects to anything like the same extent as some of the other sugar-producing countries, yet the plagues referred to, spread with such alarming rapidity under favourable conditions that no efforts should be spared to stamp them out. It is also evident that in this direction isolated efforts are almost useless on the part of individuals; the movement must be general, and thus be aided by the very best scientific and other assistance procurable. To show the necessity of prompt and united action being taken in this direction, it is well known that in the West Indies whole districts have gone completely out of tillage owing to the prevalence of certain forms of disease. More recent experience and inquiry have shown that in nearly every instance careless and improvident cultivation were the resulting causes; and in many cases the difficulties have been overcome and plantations reclaimed from desertion by the adoption of a scientific and intelligent system of farming, and the use of certain specifics against insect pests. In support of the remarks made above it cannot be denied that there are districts in the colony where the majority of the cultivators adopt the most approved methods, but the failure of a minority—perhaps a small one—to join in the effort made, and by carelessness and neglect permitting their farms to become centres from whence a constant cause of mischief is disseminated to those of their more prudent neighbours, renders the efforts of the latter almost nugatory. "*The Diseases in Plants Act of 1896*" provides a remedy by compelling owners on the demand of an inspector to take all necessary steps to treat diseased plants, and, if necessary, on the demand of the Minister to destroy the same. This measure will, no doubt, be to some extent effective in dealing with extreme cases, by preventing persons conducting their holdings in such a manner as to become a source of injury to the farms of the intelligent and thrifty; but a large amount of evil may still result long before the circumstances would warrant official interference. Against such, the best defence is to educate the offenders into realising the advantage to be derived from careful and efficient cultivation.

It is generally assumed that the kinds of cane now planted give a return within twelve months from planting or cutting; and although for the most part this is so, yet in specific years the figures given in the agricultural schedule show that a considerable amount of cane is held over annually. Thus, in 1895, 77,247 acres were under cane, and only 55,771 acres, or 72 per cent., were crushed; whilst last year there were 83,093 acres of land under cane; of this 66,640 acres, or 80 per cent., was crushed, which would appear to be a larger proportion than usually obtains, the mean for the last ten years being in accord with that for 1895—namely, 72 per cent. Probably the necessity of cutting frosted areas which would have otherwise been held over operated to raise the proportion of the area which was crushed last year, the winter of 1896 having proved an exceedingly severe one.

In 1896 there were 2,254 schedules received in which cane, grown for purposes of sugar production, was returned as one of the items of cultivation. In 1,286 of these the area crushed exceeded ten acres. A large number of persons plant cane as food for live stock, very frequently too in localities where its successful cultivation for sugar-making purposes would be out of the question. In such case the area thus dealt with is not included amongst that specially devoted to the cultivation of sugar-cane.

The following table gives full details of the sugar crop during the past two years in the twenty districts where cane was cultivated :—

T.

Petty Sessions District.	Cultivation.			Production.					
	Area in 1895.	Area in 1896.	Increase or —Decrease in 1896.	1895.		1896.		Increase or —Decrease in 1896.	
				Area Crushed.	Produce.	Area Crushed.	Produce.	Area Crushed.	Produce.
Ayr	6,084	6,089	5	4,035	6,500	4,515	6,146	480	—354
Bowen	414	692	278	...	...	...	...	...	...
Bundaberg	19,589	17,987	—1,602	16,349	24,162	17,660	25,974	1,311	1,812
Cairns	2,356	3,124	768	1,437	2,722	1,857	2,932	420	210
Childers	8,751	10,866	2,115	5,221	8,946	8,267	18,190	3,046	9,244
Cleveland	9	2	—7	7	7	2	3	—5	—4
Gin Gin	1,460	2,471	1,011	783	80	1,829	2,167	1,046	2,087
Gympie	3	...	—3	...	...	...	...	...	...
Harrisville	28	98	70	20	9	31	25	11	16
Ingham	6,508	7,180	672	5,329	9,934	6,005	11,938	676	2,004
Logan	1,567	1,656	89	1,560	1,504	1,656	2,058	96	554
Mackay	20,544	21,076	532	15,566	22,839	16,428	16,515	862	—6,324
Marburg	440	637	197	165	154	440	733	275	579
Maroochy	189	178	—11	146	255	178	178	32	—77
Maryborough	1,677	1,377	—300	1,063	2,128	1,184	1,309	121	—819
Mourilyan	4,008	5,083	1,075	3,325	5,357	4,167	8,645	842	3,288
Nerang	963	1,220	257	48	43	651	910	603	867
Port Douglas	540	1,208	668	...	...	...	...	...	...
Rockhampton	885	773	—112	650	1,600	690	1,550	40	—50
Tiaro	1,232	1,376	144	67	15	1,080	1,501	1,013	1,486
Totals, 1895	77,247	...	...	55,771	86,255	...	...	...	...
Totals, 1896	...	83,093	...	...	...	66,640	100,774	...	...
Increase in 1896	...	...	...	7,881	...	...	...	10,874	22,147
Decrease in 1896	...	...	...	2,035	...	...	...	5	7,628
Net Increase in 1896	...	...	...	5,846	...	...	...	10,869	14,519

Dealing first with the two great sugar districts of Mackay and Bundaberg, the former—which had for some years returned a smaller acreage than Bundaberg—in 1895 assumed the premier position. In 1896 this has been more than maintained, for, whilst in that year 532 acres were added to the canefields of Mackay, the area in Bundaberg last year was reduced by 1,602 acres. If the adjoining districts of Childers and Gin Gin be taken into consideration—for both of which districts Bundaberg is the centre and the port—then the combined areas cultivated under cane would amount to 31,324 acres. Ingham, Ayr, and Mourilyan are rapidly becoming important centres of the sugar industry. In the first named, the planted area was increased to the extent of nearly 10 per cent. In Ayr, the area of 6,089 acres was only a nominal increase on 1895—namely, 5 acres; in Mourilyan, however, the increase of 1,075 acres, or 27 per cent., was the largest actual increase recorded in any district except Childers, and the largest relative increase in any district in which the sugar area exceeded 1,000 acres in 1895. Cairns added 768 acres, Bowen 278 acres, and Port Douglas 668 acres to the sugar area planted. The latter district, however—where 1,208 acres are now under cane—crushed none; the central mill, being erected under “The Sugar Works Guarantee Act of 1893,” not having been completed. A considerable increase is also apparent in the area planted in the West Moreton districts of Harrisville and Marburg, 735 acres having been under cane there last year as against 468 in the previous year.

A consideration of the areas crushed and the produce obtained shows that in several instances the positions of the various districts are reversed. Bundaberg, for instance, crushed a larger area than Mackay, and manufactured a much larger quantity of sugar—indeed in no district of importance was there a decrease in the area crushed in 1896 as compared with 1895. The greatest increase was in Childers, where there were 5,221 acres crushed in 1895, and 8,267 acres last year, a centesimal increase of 58. This may have been caused by the facilities afforded for the crushing of cane and the production of sugar by the splendid mill erected there by the Colonial Sugar Company, which was finished in time for the season of 1896. The other districts in which the additional acreage crushed in 1896 exceeded 1,000 acres were—Bundaberg, 1,311 acres; Gin Gin, 1,046 acres; and Tiaro, 1,013 acres.

There were 100,774 tons of sugar made in 1896, or 14,519 tons more than in the preceding year. Nearly three-fourths of this—72 per cent.—was contributed by the four districts of Bundaberg, Childers, Mackay, and Ingham. Mourilyan and Ayr also contributed important outputs—namely, 8,645 tons and 6,146 tons respectively.

The average yields obtained from each acre of cane vary considerably in the different districts, and also from year to year in the same district. Taking districts in which the area crushed last year exceeded 1,000 acres, the average yields for the past four years have been as follow:—

	1893.	1894.	1895.	1896.
Ayr	1.84	2.57	1.61	1.36
Bundaberg	1.71	1.50	1.48	1.47
Cairns	1.25	1.75	1.89	1.58
Childers	...	...	1.71	2.20
Ingham	2.26	2.72	1.86	1.99
Logan	1.23	1.25	0.96	1.24
Mackay	1.79	1.79	1.47	1.01
Maryborough	2.18	2.09	2.00	1.11
Mourilyan	1.36	1.49	1.61	2.08
Tiaro	...	...	...	1.39
Colony	1.74	1.84	1.55	1.51

The highest average yield was obtained at Childers, where the exceptionally high mean return of 2.20 tons per acre was recorded. The frost was somewhat severely felt in this district, but no doubt its effects were modified to some extent by the belts of scrub which yet remain there; whilst the land, being only recently occupied to any extent, is necessarily nearly all virgin soil, and as it consists of scrub land of the first quality the severity of the winter was fully counterbalanced by the fertility of the soil.

Mourilyan and Ingham came next with the good average yields of 2.08 and 1.99 tons per acre respectively. These districts would not naturally be affected by the cold winter experienced in 1896, and are also better placed with respect to rainfall than districts further South, where dry weather greatly retarded the cane growth last year.

The results obtained in the Mackay district were the least satisfactory of any, being only just over 1 ton to each acre crushed. The extreme drought after planting, followed by the frosts—the mischief from which was further intensified by wet weather—at a later period, caused the sugar season at Mackay last year to prove one of the worst experienced for some years. On the Logan, where the frost would have been expected to have created great havoc, the results were better than in 1895, and about the same as in the two previous years.

The home requirement for sugar for the past year or two has amounted to about 20,000 tons per annum, and is increasing at a greater ratio than the population. This is due to the expansion of various industries, notably those of brewing and jam making. The increase during 1896 in these two manufactures alone would be responsible for an additional consumption of sugar to the extent of about 1,000 tons. On the basis of last year's production there would be left about 80,000 tons available for export. Assuming the consumption for the rest of Australasia at the same ratio *per capita* as for Queensland, this would provide a market for about 160,000 tons; but for this Fiji at least becomes a competitor, and Honolulu and Java might perhaps also have to be to some extent reckoned with. As Fiji produces annually from 30,000 to 35,000 tons, by the time the Queensland output has increased by an additional 25,000 or 30,000 tons more distant markets will have to be sought for, and direct competition with the bounty-fed beet sugar of Europe encountered.

Fortunately for this colony, as well as for all countries where the production of cane sugar is one of the prominent industries, signs of dissatisfaction are apparent during recent years on the part of the general taxpayer in those countries where the cultivation of beet for the manufacture of sugar is fostered by a Government bonus, because the bonus not only adds considerably to the burthen of taxation, but also operates to increase the cost of sugar to the consumer. The Bill recently passed by the French Chamber of Deputies providing for the payment of bounties to the manufacturers of beet sugar was only passed by a narrow majority, and a conference was to have been held in Paris shortly afterwards at which all the great beet sugar producing countries of Europe were to be represented, to adopt measures to bring about the conclusion of the present system. It is true that during the progress of this industry, which has now attained gigantic proportions, great advances have been made both in the production of beets containing a largely increased percentage of saccharine matter and also in the economical manufacture of the sugar; but whether these improvements are sufficient to enable the industry to be pursued at a profit without the support of special monetary assistance on the part of the State is very doubtful. With the removal of the bounty the production would probably cease, to the manifest advantage of tropical countries where the sugar-cane is capable of cultivation. This subject formed one of the points brought under notice of the English authorities by our Premier, who is now in England, as vitally affecting the future cultivation of sugar in this colony.

ARROWROOT.—I referred in my last Report to a difficulty that had arisen under the Imperial Food and Drugs Act in connection with the disposal of Queensland arrowroot in the United Kingdom, owing to the fact that it was the product of a plant not botanically synonymous with the plant from which the article known as arrowroot in the British market is obtained. Since then the Secretary of the Board of Inland Revenue, London, in response to a communication from the Agent-General for Queensland, replied:—"The term arrowroot, without prefix or qualification, should, speaking strictly, be restricted to the starch derived from plants of the genus *Maranta*. . . . A purchaser asking simply for arrowroot would presumably by use and wont expect to be supplied with *Maranta starch*.

Queensland arrowroot, the product of *Canna edulis*, is quite a different starch. . . . Inasmuch as the term arrowroot without a prefix or qualification is now well established, the vendors of the Queensland article would, in the Board's opinion, best protect themselves by labelling it as 'Queensland arrowroot, prepared from *Canna edulis*.'

So growers of arrowroot in the colony who wish to export to the United Kingdom must either plant the *Maranta* or make up their minds that their product shall be placed on the home market distinctly labelled as above, and then rely upon the merits of the arrowroot produced from the *Canna edulis* for securing a sale of that article.

The area planted with arrowroot during 1896 was 309 acres, or 115 acres more than in 1895. This is the largest area planted during the last ten years. The average return obtained was also very good—namely, 2,266 lb. per acre, but less than has been obtained on several occasions during the decade. Of the quantity produced—700,303 lb.—rather more than one-half, or 381,378 lb., was exported.

TOBACCO.—The cultivation of tobacco did not increase last year; on the contrary, there were only 994 acres planted in 1896, against 1,061 in the previous year; but the yield obtained was a very satisfactory one, the lesser area returning 8,629 cwt., or 1,118 cwt. more than was gathered from the larger area planted in 1895.

The average yield of 8.68 cwt. per acre exceeded the mean of the average return obtained during the past ten years.

Mr. McCarty, in his *Statistician and Economist*, gives the tobacco crop of the United States for two years as—1893, 687 lb. per acre; and for 1894, 777 lb. As the Queensland returns for same area for the same periods were 1,080 lb. and 1,172 lb. respectively, this compares more than favourably with regard to quantity with the United States. Perhaps less care is used here in picking, and leaves are taken into the crop that should be rejected; thus an increased weight is gained at the cost of a deterioration in quality, such deterioration more than counterbalancing the additional production,

The general table relating to agriculture to be found in the Appendix gives full information as to the cultivation of this crop. The great bulk, indeed nearly all the tobacco, is produced in the Southern Division of the colony to the west of the Range. Five districts contribute 98 per cent. of the total tobacco area of the colony—namely, Texas, 482 acres; Inglewood, 241 acres; Killarney, 164 acres; Stanthorpe, 59 acres; and Warwick, 18 acres, producing 8,511 cwt., or 99 per cent. of the aggregate output. The average yield per acre for each of these districts was—Texas 8·11 cwt., Inglewood 8·67 cwt., Killarney 9·65 cwt., Stanthorpe, 10·76 cwt., and Warwick 16·33 cwt. per acre.

Tobacco, in one form or another, was imported last year to the extent of 727,791 lb., valued at £74,501. The exports amounted to 71,757 lb., valued at £5,065, leaving a net import of 656,034 lb., which, added to the quantity locally produced, gives the total consumption as 1,622,482 lb., in which the home-grown article was represented to the extent of 60 per cent. This consumption gives an average of 56 oz. per annum for each head of population. The following figures taken from Mulhall furnish information as to the amount of tobacco consumed in a few of the principal countries of Europe:—United Kingdom, 28 oz.; France, 29 oz.; Germany, 48 oz.; Belgium, 84 oz.; Switzerland, 82 oz. Some little allowance no doubt would require to be made from all these figures for tobacco used for purposes other than smoking, in connection with horticulture and kindred pursuits.

Whilst the consumption in Queensland is greatly in excess of that for the United Kingdom, yet it falls a long way short of that of some of the countries quoted. When considering this subject it must not be forgotten that the proportion of adult males is probably greater in the colony than in any of the other countries mentioned.

The establishments engaged in the manufacture of tobacco in this colony last year employed 282 hands, and turned out 575,864 lb. of tobacco, 1,290 lb. of cigars, and 11,325 lb. of cigarettes, in all 588,479 lb. of manufactured tobacco.

As there were 963,448 lb. of dried leaf or unmanufactured tobacco produced, and 64,046 lb. of unmanufactured tobacco imported, whilst the export of the last-named only amounted to 4,524 lb., a large amount of leaf must have been in stock at the end of the year awaiting manufacture.

COFFEE.—As the management and cultivation of this crop becomes better understood it will no doubt become one of considerable importance. The climatic conditions, especially of the Northern portion of the colony, are admirably suited for its culture, whilst there are large areas of land there possessing a soil of unrivalled fertility.

There were 138 acres of land under coffee in 1896, or more than double the area planted in 1895, when 60 acres were planted. Unfortunately the yield would appear to have been a very poor one—70·34 lb. per acre; but as this average is taken over the whole acreage whilst it is known that there has been so relatively large an acreage added in the shape of new plantations during the year, and a very considerable proportion of the total area consists of trees not yet bearing, the percentage quoted is hardly a fair one. The following figures will illustrate this:—

Districts.	Total Acres.	Not bearing. Acres.	Bearing. Acres.	Yield. Lb.	Average on area bearing.
Cairns ...	96	81	15	7,795	520·00
Cook ...	16	9	7	512	73·00
Mareeba ...	9	9	...	...	...
Maroochy ...	5	2	3	1,800	467·00
Maryborough ...	5	5	...	...	...
Rockhampton ...	4	4	...	...	...
Douglas ...	2	2	...	...	...
Cardwell ...	1	...	1	100	100·00
Totals	138	112	26	9,707	373·00

As the coffee plant, though bearing in two or three years, does not attain its full reproductive powers for a considerably longer period, it is manifest that during the early years of planting the yield on the total area would afford no information as to the true average return obtainable.

It is satisfactory to know that this crop is acquiring great attention in this colony at present, as experts say that parts of Queensland cannot be excelled in any part of the world for the production of this berry.

VINES.—Like so many other ultimate issues of agricultural products, wine can no longer be counted as the produce of the farm. Division of labour, which has wrought such a change in secondary industrial manufactories, is now equally revolutionising the production of primary materials. The manufacture of butter, cheese, bacon, wine, the washing of wool, and many other undertakings are no longer, to anything like the same extent as formerly, component parts of the primary industries which gave them birth or to which they are related.

With respect to the vineyard, to such an extent has the new movement grown that the farmers' yields have to be reckoned in grapes, and the production of the wine therefrom treated as a separate industry; otherwise the returns of the various districts could not be differentiated, and omissions and duplications would be unavoidable.

Last year there was a larger area of bearing vines than in 1895, and the quantity of grapes obtained was greater. The area and the yield of grapes for the past two years were as follow:—

Year...	Vineyards.			Grapes Gathered. Lb.	Average Yield. Lb.
	Acres Bearing.	Acres not Bearing.	Total.		
1895 ...	1,782	239	1,951	4,254,795	2,388
1896 ...	1,842	178	2,020	5,122,531	2,781

The following table furnishes information respecting this crop for the past two years in the chief centres of grape cultivation :—

V.

Petty Sessions District.	Area under Vines.									
	1895.			1896.			Increase + or Decrease - in 1896.	1895.	1896.	
	Bearing.	Not yet Bearing.	Total Area.	Bearing.	Not yet Bearing.	Total Area.		Grapes Gathered.	Grapes Gathered.	
Roma ...	442	20	462	427	14	441	- 21	1,043,650	1,411,560	
Brisbane ...	152	12	164	154	4	158	- 6	447,147	332,433	
Toowoomba ...	155	1	156	151	6	157	+ 1	604,355	836,823	
Warwick ...	112	32	144	135	2	137	- 7	309,174	494,165	
South Brisbane ...	132	8	140	126	8	134	- 6	278,744	201,735	
Logan ...	41	11	52	63	1	64	+ 12	88,540	137,404	
Gatton ...	70	11	81	57	3	60	- 21	133,768	143,340	
Maryborough ...	45	10	55	52	3	55	... 55	94,551	121,948	
Ipswich ...	47	4	51	48	2	50	- 1	52,150	58,590	
Highfields ...	39	11	40	43	1	44	+ 4	110,550	218,520	
Marburg ...	49	2	51	40	2	42	- 9	135,317	126,870	
Laidley ...	18	4	22	39	11	50	+ 28	36,746	88,004	
Allora ...	37	4	41	39	1	40	- 1	91,249	98,733	
Rockhampton ...	27	17	44	34	19	53	+ 9	56,131	64,530	
Nerang ...	52	3	55	30	3	33	- 22	51,419	45,339	
Gympie ...	28	7	35	24	5	29	- 6	54,054	32,892	
Cleveland ...	17	10	27	25	1	26	- 1	45,660	37,966	
Mitchell ...	22	4	26	21	3	24	- 2	72,440	42,390	
Cape River ...	...	...	...	...	...	13	...	...	15,545

Roma is at the head of the table with a total area of 441 acres, which was a decrease of 21 acres on the figures for 1895. Other districts where the average was over 100 were Brisbane, Toowoomba, Warwick, and South Brisbane. The five districts together contributed 1,027 acres, or 51 per cent. of the total area. There were thirteen other districts in which the area was 24 acres and upwards; whilst the district of Cape River has been added to the table, because the area there—13 acres—is sufficient to indicate an extension of viticulture into a somewhat unusual locality.

On analysing the produce it is seen that there was a large increase in the quantity of grapes obtained from Roma vineyards. In Toowoomba and the adjoining district of Highfields, and also in Warwick, it was evident that the crop obtained was better than in 1895; whilst in Brisbane North and South the decline in production was out of proportion to the reduced area found in both those districts.

There were 704 persons engaged in the manufacture of wine in 1896, who turned out 170,733 gallons; this would absorb about 2,902,000 lb. of grapes.

The number of wine-makers and the quantity of wine and brandy made during each of the past five years were as follow :—

Year.	Number of Makers.	Wine Made.	Brandy Made.
		Gallons.	Gallons.
1892	528	193,337	660
1893	466	101,528	664
1894	567	176,497	917
1895	661	238,208	1,259
1896	704	170,733	767

The foregoing statement shows that although there was an increase in the number of wine-makers of forty-three in 1896, the quantity of wine made was 67,475 gallons less than in the previous year, and that there was also a falling off in the quantity of brandy produced of 492 gallons.

HAY.—The returns obtained from hay of all kinds during 1896 were rather more satisfactory than in 1895, and was slightly above the average of the past five years, as will be seen from the following statement :—

1891 1·92	1894 1·99
1892 2·10	1895 1·78
1893 1·88	1896 1·95

There was a very large increase in the area devoted to the hay crops last year—namely, 25 per cent. on the figures for 1895. This increased area, moreover, was not derived, as is so frequently the case, by a corresponding decrease in land under artificially sown pasture, as the latter was also in excess last year.

The following table affords a comparison of each of the different kinds of hay crops for the past two years:—

Mown for Hay.	W.		
	1895.		1896.
	Acres.	Average Yield per Acre.	Acres.
Wheat ...	1,344	Tons.	1,845
Oats ...	9,763	1·06	11,565
Barley ...	221	1·28	282
Rye ...	410	1·68	427
Lucerne ...	14,315	2·30	17,892
Panicum ...	2,411	2·15	3,673
Other Grasses ...	145	1·93	80
		1·56	
TOTAL ...	28,609	1·78	35,764
			1·95

The land under lucerne, oats, and panicum, in the order named, chiefly contributed to the increase in the acreage above referred to. Wheat, rye, and panicum gave poorer average yields than in 1895, but as these were on small areas the mean return for the whole colony was not greatly affected thereby. Lucerne is the crop mostly in favour for hay, and last year the acreage under it comprised within a little of half the total area sown for hay, whilst that under oats included 65 per cent. of the remainder.

GREEN FORAGE.—The land employed in the production of greenstuff in 1896 was not quite so much as in the previous year. The following statement furnishes particulars respecting the green fodder crops for 1896. It also probably includes the area the product of which was placed in silo:—

	Acres.		Acres.
Wheat ...	1,266	Sugar-cane ...	1,069
Oats ...	2,802	Sorghum, &c. ...	3,348
Barley ...	1,236	Lucerne ...	4,630
Maize ...	1,423	Panicum ...	825
Rye ...	223	Other grasses ...	2,687
		Total, 19,509 acres.	

As in the case of hay, lucerne also stands first as a green crop. The area under panicum being nearly doubled shows that a dry season was anticipated in 1896, as on the least appearance of dry weather farmers at once plant panicum in consequence of its well-known drought-resisting qualities.

BANANAS.—This crop has in recent years invited a large amount of attention, although for some time past prices have ruled so low that it was not considered a profitable one. Notwithstanding the low prices, the area devoted to the production of bananas steadily increases, so that the acreage for 1896 was considerably in excess of double what it was ten years ago. Nor is this surprising when the wonderfully reproductive nature of this fruit is considered. It is stated to be the most prolific of known plants, exceeding in this respect the potato by forty-four times and wheat by 131 times.

The 4,447 acres planted yielded 17,059,124 dozen of fruit. This has only been exceeded once—namely in 1890—when 22,002,092 dozen were gathered, returning on the 3,890 acres planted an average crop of 5,656 dozen to each acre. In comparison with the above the average per acre last year was 3,810 dozen.

The following table furnishes details respecting this crop for the past two years in all districts in which the area planted exceeded 20 acres:—

X.

Petty Sessions District.	Area.		Production.		Increase + or Decrease — 1896.	
	1895.	1896.	1895.	1896.	Area.	Quantity.
					Acres.	Dozen.
Brisbane ...	142	142	143,525	170,740	...	+ 27,215
Bundaberg ...	27	23	32,816	25,246	— 4	— 7,570
Cairns ...	1,122	1,778	7,350,700	8,172,900	+ 656	+ 822,200
Cleveland ...	366	336	604,294	505,884	— 30	— 98,410
Cook ...	55	55	133,179	75,370	...	— 57,809
Douglas ...	18	32	26,273	52,546	+ 14	+ 26,273
Logan ...	374	293	618,414	390,613	— 81	— 227,801
Maroochy ...	252	264	368,310	359,318	+ 12	— 8,992
Maryborough ...	135	114	156,927	104,159	— 21	— 52,768
Mourilyan ...	1,127	1,113	4,923,401	6,745,980	— 14	+ 1,822,579
Rockhampton ...	26	21	29,494	14,922	— 5	— 14,572
Somerset ...	15	110	6,570	14,304	+ 95	+ 7,734
Townsville ...	54	38	56,600	17,020	— 16	— 39,580

The principal increase in land planted is returned from Cairns. The additional area in this district amounted to 656 acres; there was also an increased production of 822,200 dozen. In Mourilyan, whilst there were 14 acres less under bananas, the crop gathered amounted to 6,745,980 dozen, or to 1,822,579 dozen more than in 1895. These two districts together provided 2,891 acres, or 65 per cent. of the total.

PINEAPPLES.—There were 823 acres under pineapples during 1896, a decline of 24 acres in comparison with 1895. The output amounted to 313,835 dozen, giving an average yield of 381 dozen to each acre. In 1895 the aggregate return was 376,875 dozen, and the average 445 dozen to the acre.

At one time—about 1891-2—there was an important trade carried on in exporting pineapples to the markets of the southern colonies. A certain amount still continues, but it has become very much restricted. This is in part due to the difficulty of securing a certain and satisfactory price. Too frequently the fruit-brokers by forming rings would control the market and secure the fruit, which as a perishable commodity had to be sold at their own figure. In addition to this, growers of the fruit have had to combat during the last five years a disease which spread through many of the pineapple plantations and destroyed most of the fruit. This has contributed to the reduced area devoted to pineapple cultivation during the past four years.

The districts in which this fruit is grown to any extent are for the most part confined to the coast, and particulars respecting the crop raised in each is contained in the following table:—

V.

District.	1895.		1896.		Increase + or — Decrease.	
	Acres.	Dozens.	Acres.	Dozens.	Acres.	Dozens.
Brisbane	447	245,244	435	194,310	- 12	- 60,934
Cairns	45	10,810	67	13,670	+ 22	+ 2,860
Charters Towers	20	27,989	16	5,195	- 4	- 22,794
Cleveland	26	3,428	26	3,562	... ..	+ 134
Cook	34	5,323	34	4,210	... ..	- 1,113
Croydon	7	1,120	8	2,827	+ 1	+ 1,707
Douglas	18	6,053	20	6,726	+ 2	+ 673
Logan	45	23,254	43	21,185	- 2	- 2,069
Maryborough	29	5,626	18	7,320	- 11	+ 1,694
Maroochy	29	3,657	18	3,385	- 11	- 272
Mourilyan	6	18,600	10	2,750	+ 4	- 15,850
Redcliffe	14	16,000	13	16,420	- 1	+ 420
South Brisbane	20	4,255	14	5,694	- 6	+ 1,439
Townsville	14	2,704	12	4,230	- 2	+ 1,526

The police district of Brisbane includes more than half the total area, and considerably more than half the total production. The most important increase was that of 22 acres in Cairns, whilst Maryborough and Maroochy equally divide a decrease of a like amount.

ORANGES.—The climate and soil of a large extent of the colony is so eminently suited to the growth of all trees of the *citrus* genus that a practically unlimited production of oranges could readily be secured if an assured market were only available. Outside the colony, Melbourne has hitherto been the principal outlet for Queensland oranges, and here they meet with the heavy competition of New South Wales fruit. A year or two ago, when there was a prospect of direct communication with Vancouver, it was hoped that—as our season was at its best when oranges were out in California—a profitable trade might be opened up with this fruit with Canada and other parts of North America. But as the fruit had to be shipped from here through Sydney, the increased cost to such a trade rendered the project unremunerative. Failing this market, and the supply in Australia being in excess of the demand, the prospect of an expansion of our orange trade did not appear hopeful. The shipment of fruit to Europe has for a long time been mooted, and some was sent there, but the earlier experiments with soft fruits have not been very encouraging. Recently, however, a further effort in this direction was made from Sydney, and was brought to a most successful issue. This effort to open a market for our Australian *citrus* fruits promises to become the precursor of better things, as it proves the possibility of so selecting and packing oranges that they will bear the long and trying voyage to Europe. The experiment referred to was made by the "Board of Exports," Sydney, who purchased 1,700 cases of oranges, had them carefully packed under the supervision of Mr. G. H. Benson—now Queensland's fruit expert—and shipped for London by the "Ophir." The result was the arrival of the fruit in good condition, a consequent ready sale at good prices, and a substantial profit was made on the transaction.

There were 1,791 acres under oranges in 1896, or 109 acres less than in 1895, but otherwise the largest area ever planted with that fruit. This decline was occasioned by failing trees being got rid of; it is therefore probable that the large increased area recorded in 1895 partly consisted of plantations then made with a view of replacing some of those which during last year have been cleared away.

The return obtained was a very poor one, the average being the worst recorded since 1889—namely, 753 dozen to the acre. For the three preceding years the returns had been—1893, 1,634 dozen; 1894, 1,225 dozen; 1895, 1,050 dozen. The aggregate return for 1896 was 1,348,990 dozen.

Particulars respecting the cultivation of oranges in some of the principal districts are recorded in the following table:—

Z.

Petty Sessions District.	Area.		Production.		Increase + or Decrease -- in 1896.	
	1895.	1896.	1895.	1896.	Area.	Production.
	Acres.	Acres.	Dozen.	Dozen.	Acres.	Dozen.
Bowen ...	105	99	81,710	78,798	- 6	- 2,912
Brisbane ...	70	76	103,216	66,466	+ 6	- 36,750
Bundaberg ...	56	48	34,589	37,950	- 8	+ 3,361
Caboolture ...	37	24	13,050	7,904	- 13	- 5,146
Cairns ...	82	81	163,364	107,430	- 1	- 55,934
Cardwell ...	136	59	407,500	72,300	- 77	- 335,200
Charters Towers ...	23	23	92,616	8,708	...	- 83,908
Cleveland ...	84	78	48,272	54,720	- 6	+ 6,448
Cook ...	70	49	66,921	35,085	- 21	- 31,836
Douglas ...	101	83	95,906	50,090	- 18	- 45,816
Gatton ...	129	120	88,820	33,303	- 9	- 55,517
Gympie ...	46	34	39,567	14,714	- 12	- 24,853
Herberton ...	19	23	24,000	19,270	+ 4	- 4,730
Logan ...	50	42	23,202	16,040	- 8	- 7,162
Maroochy ...	84	76	52,945	30,057	- 8	- 22,888
Maryborough ...	174	222	160,594	186,999	+ 48	+ 26,405
Nerang ...	96	104	55,350	62,350	+ 8	+ 7,000
Redcliffe ...	51	59	34,300	23,131	+ 8	- 11,169
Rockhampton ...	83	74	71,505	55,370	- 9	- 16,135
Roma ...	27	22	17,071	102,343	- 5	+ 85,272
South Brisbane ...	52	29	16,065	10,984	- 23	- 5,081
Tiaro ...	31	30	24,521	20,349	- 1	- 4,172
Toowoomba ...	56	54	74,207	39,370	- 2	- 34,837
Townsville ...	25	34	15,986	77,750	+ 9	+ 61,764

Maryborough shows the largest acreage and the largest increase in acreage of any district, and contributed a large proportion to the output of the colony. The average yield obtained was above that for the whole colony—namely, 842 dozen to each acre. There were two other districts in which the area under oranges exceeded 100 acres—Gatton 120 acres, and Nerang 104 acres. The average returns in these districts were 277 dozen and 599 dozen per acre respectively.

OTHER CROPS.—These comprise all varieties of trees, plants, &c., that receive the attention of agriculturists which it is impossible to include in a special line by name in the household schedule from want of space, and the necessity for not rendering it too complicated. To meet the difficulty, however, provision is made for the insertion of these extra varieties by leaving a few blank lines to be filled in by the proprietor when recording all such crops.

During 1896, 43 different kinds of crops, for which a special line was not provided in the schedule, had been cultivated by farmers, and in this manner returned to the statistical office. These consisted of 21 fruits, 13 varieties of vegetables, 1 other kind of grain, and 8 miscellaneous plants. Full details as to the acreage and produce of each will be found recorded in the last table in the Appendix to this Report. There were 3,875 acres returned under "Other Crops" in 1896, which was 246 acres less than in the year 1895.

OTHER FRUITS.—As already stated, these included 21 varieties, the chief of which were—Cocoanut, 506 acres, producing 18,558 dozen; mangoes, 205 acres, proceeds 252,068 dozen; melons, 145 acres, product 11,746 dozen; apples, 74 acres, return 62,426 dozen; plums, 54 acres, output 2,454 bushels; lemons, 33 acres, crop 21,438 dozen; persimmons, 29 acres, brought 4,265 dozen; and strawberries, 27 acres, returning 20,565 quarts. The cocoanut is necessarily only planted in the Northern coastal districts. The mango thrives in most parts of the colony where the frost is not too severe, and especially on the eastern side of the Great Dividing Range. The apple is principally grown on the Downs, especially in the vicinity of the New England district. The lemon flourishes in so many parts of the colony that the production might be expected to be equal to the Australian demand for this fruit, and yet lemons are imported from Italy into the southern colonies, and reach here in good condition, although Italians are not generally reputed as possessing a large amount of commercial enterprise.

The question of cultivating the olive has been attracting a considerable amount of attention of late, and the Department of Agriculture recently issued a bulletin on the subject from the pen of Major Chapman, British Consul at Leghorn. It would appear that the soil and climate of a portion of the colony are well fitted for the growth of the olive.

OTHER VEGETABLES.—These occupied 2,619 acres, or 68 per cent. of the total area under "Other Crops," and consisted largely of pumpkins—1,980 acres—which returned 10,721 tons. There was also a considerable area under taro and yams, 200 acres; and cabbages, 169 acres.

GARDENS AND ORCHARDS.—There were 3,308 acres comprised in the gardens and orchards of the colony. The term "orchard" as used here is applied to a few fruit-trees of different varieties, but area included under each being too small to be included under a specific heading. This, for instance, accounts for the very small area returned as under peaches. This fruit-tree is found planted all over the colony, and the aggregate area must be considerable; but the trees are so scattered and planted amongst other fruit-trees that the acreage cannot be computed except where the number is so great that they are specially returned, and can thus be included under "Other Crops." The same remarks apply, although perhaps to a less extent, with respect to vegetables of all kinds, and even in a slight degree to maize, sorghum, and many other crops which are grown in insignificant patches.

ARTIFICIALLY SOWN PASTURE.—The area of the land artificially sown with perennial grasses which was devoted to pasture was rather greater in 1896 than in the preceding year, but was still far short of the area so employed in 1894. Full particulars as to the districts in which the natural herbage is supplemented for pasture purposes by the preparation of artificially sown meadow land will be found on reference to Table VIII. in the Appendix.

Most satisfactory results are frequently obtained in scrub land by sowing clover and other perennial grasses in soil which has received very little previous cultivation. In one case perhaps a crop or two of corn is previously taken immediately after the timber is felled and burnt off, the land having been worked only with the hoe. By these means the first growth of weeds is kept in check, the tillage being the least amount which can be bestowed. As such land rapidly—after the first crop of weeds has been overcome—becomes excellent pasture, and supports a surprisingly large number of cattle in proportion to its acreage, whether for fattening or for dairy purposes, it forms at a small cost a most valuable adjunct to the farm. In six districts upwards of 500 acres of artificially sown pasture were utilised for grazing purposes—namely, Toowoomba, 3,939 acres; Warwick, 1,740 acres; Killarney, 1,626 acres; Herberton, 834 acres; Cairns, 815 acres; and Nerang, 548 acres.

ENSILAGE.—In 1895 there was a considerable increase in the quantity of forage returned as having been stored by means of the silo, although the tonnage even in that year fell far short of the merits such system of storage warrants. There were 748 tons of ensilage returned in 1895, and only 495 in the subsequent year, showing a reduction of 253 tons in the latter year. The reason for this is hard to determine, unless it is due to the extreme conservatism of our farmers. At one time it was deemed impossible to store fodder in this manner except by the aid of erections and appliances more or less costly; but it has been demonstrated again and again that green forage may be stored in the open without any pit or enclosure, and with little extraneous pressure, much in the same way as hay, and with but little if any more trouble, whilst the nutritive capacity of the like quantity of green herbage thus stored is said to be very much greater than if turned into hay. A silo, moreover, can be packed with many kinds of forage that cannot be converted into hay, such as green maize, sorghum, green sugar-cane, &c.

One satisfactory circumstance in connection with the employment of the silo last year—which in a degree compensates for the smaller quantity made, and affords hope of an extension in the near future—was the extended area over which this mode of preserving forage was adopted. There were only eleven districts where ensilage was made in 1895, and nineteen districts last year.

	Tons.
Warwick ...	100
Brisbane ...	80
Goodna ...	50
Caboolture...	42
Dalby ...	40
Fourteen other districts ...	183
Aggregate total... ...	<hr/> 495

In conclusion, I may say that multifold duties which I have to perform has prevented me from devoting as much time as I would have wished to this Report. I have also to express my acknowledgments to Mr. Thornhill Weedon for the able assistance he has given me in its preparation, and for the care with which the tabulated matter with which it is interspersed has been prepared by him.

WILLIAM T. BLAKENEY,
Registrar-General.

Brisbane, 1st July, 1897.

APPENDIX.

LIVE STOCK.

Table No. I.

RETURN of the NUMBER of HORSES, CATTLE, SHEEP, and PIGS, in the several PETTY SESSIONS DISTRICTS of the Colony of QUEENSLAND, on the 31st DECEMBER, 1896.

Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.	Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.
Adavale	3,752	44,391	702,694	37	Ingham	2,843	18,535	140	205
Allora	5,423	16,905	94,549	2,271	Inglewood	2,203	16,652	64,658	181
Alpha	5,049	118,514	3,316	266	Ipswich	3,713	16,103	488	1,991
Aramac	1,955	26,663	298,562	55	Irisford	3,673	22,231	841,318	46
Augathella	1,988	46,688	346,401	12	Killarney	1,352	4,476	128	806
Ayr	3,766	22,541	1,035	596	Laidley	3,360	13,143	303	4,214
Banana	5,626	112,252	11,123	44	Logan	2,338	10,228	124	1,892
Barcaldine	3,745	15,106	1,070,660	185	Longreach	7,915	43,840	2,005,686	228
Beaudesert	4,898	38,521	355	5,309	Mackay	16,622	183,358	2,429	644
Biggenden	1,142	15,548	...	346	Marburg	1,750	6,529	35	3,063
Blackall	4,329	6,378	982,642	231	Mareeba	584	2,452	...	80
Boulia	9,984	254,895	106,489	59	Maroochey	1,423	6,933	20	813
Bowen	9,247	201,619	223	302	Maryborough	4,502	20,076	162	1,410
Brisbane	7,022	10,862	1,124	3,507	Mitchell	6,946	132,824	170,833	279
Bundaberg	6,637	51,974	722	1,995	Mount Morgan	1,529	2,682	2	56
Burke	6,783	163,082	41	166	Mourilyan	514	764	273	273
Caboolture	1,225	6,862	46	1,377	Muttaburra	5,313	60,831	1,694,104	311
Cairns	1,422	1,729	156	732	Nanango	5,727	89,298	7,385	865
Camooweal	1,974	24,722	21,053	24	Nerang	2,363	9,889	63	3,015
Cape River	5,829	129,478	243	595	Norman	5,462	230,988	23,104	198
Cardwell	866	4,029	...	53	Palmer	1,509	21,035	...	11
Charleville	8,371	123,036	483,098	547	Ravenswood	1,869	25,095	11	389
Charters Towers	9,812	143,505	227	719	Redcliffe	1,761	10,202	2,497	2,497
Childers	1,201	1,946	41	202	Rockhampton	17,379	233,466	3,652	3,918
Clermont	10,194	176,871	640,966	548	Roma	6,273	97,554	220,084	778
Cleveland	590	1,850	117	513	Rosewood	2,601	14,326	258	3,182
Clonecurry	10,519	296,105	353,920	309	St. George	8,821	98,106	1,484,193	284
Condamine	2,229	22,820	9,155	200	St. Lawrence	6,379	141,271	1,023	283
Cook	3,169	18,515	...	436	Somerset	170	1,132	15	92
Crow's Nest	2,615	16,641	201	1,667	South Brisbane	3,698	8,823	1,338	2,755
Croydon	2,933	19,619	2	798	Springsure	9,097	186,662	283,571	321
Cunnamulla	6,032	86,260	1,338,803	191	Stanthorpe	1,861	17,827	57,716	419
Dalby	6,964	45,214	420,169	2,057	Surat	2,668	37,523	268,015	151
Diamantina	3,487	98,329	2,375	65	Tambo	3,847	31,368	598,444	70
Douglas	390	1,168	...	75	Taroom	6,810	155,698	18,500	83
Dugandan	3,397	20,966	359	3,602	Tenningering	1,475	19,408	533	263
Eidsvold	2,822	81,704	14,311	376	Texas	834	8,698	269	28
Emerald	2,887	50,233	115	532	Thargomindah	9,744	315,635	391,484	162
Esk	6,095	64,640	1,094	2,369	Thornborough	2,363	31,977	...	52
Etheridge	6,244	147,059	...	302	Tiaro	4,000	41,581	226	1,337
Eulo	1,702	54,538	193,567	9	Toowoomba	11,557	53,315	743,201	5,294
Gatton	5,105	21,353	333	5,201	Townsville	2,880	5,944	107	1,092
Gayndah	5,327	140,774	2,632	302	Warwick	8,018	38,616	135,715	3,453
Gin Gin	2,264	46,730	321	685	Windorah	7,446	259,482	359,561	117
Gladstone	6,951	113,343	6,481	375	Winton	8,907	145,612	1,302,822	217
Goodna	625	2,286	50	458	Woodford	1,946	18,971	50	1,198
Goondiwindi	3,042	31,018	269,220	234	Yeilba	1,727	16,997	188	377
Gympie	5,141	53,168	2,545	1,765	Totals for 1896	452,207	6,507,377	19,593,696	97,434
Harrisville	2,835	19,958	568	2,501	Totals for 1895	468,743	6,822,401	19,856,959	100,747
Herberton	4,404	57,820	549	585	Increase in 1896	...	...	...	...
Highfields	2,216	7,704	299	1,839	Decrease in 1896	...	16,536	315,024	263,263
Hughenden	13,146	297,859	1,304,368	502					3,313
Hungerford	1,079	1,430	224,415	5					

Table No. II.

RETURN of the NUMBER of CATTLE and SHEEP in the various PETTY SESSIONS DISTRICTS comprised in the SOUTHERN DIVISION of the Colony for the Years 1895 and 1896, together with the INCREASE or DECREASE in the latter Year.

Petty Sessions Districts.	Cattle.				Sheep.			
	1895.	1896.	Increase.	Decrease.	1895.	1896.	Increase.	Decrease.
Adavale ...	26,081	44,391	18,310	...	675,587	702,694	27,107	...
Allora ...	15,548	16,905	1,357	...	88,711	94,549	5,838	...
Augathella ...	46,395	46,688	293	...	376,779	346,401	...	30,378
Beaudesert ...	41,013	38,521	...	2,492	379	355	...	24
Biggenden* ...	16,855	15,548	...	1,307	...	...	...	...
Brisbane ...	12,108	10,862	...	1,246	739	1,124	385	...
Bundaberg ...	53,731	51,974	...	1,757	1,194	722	...	472
Caboolture ...	7,425	6,862	...	563	90	46	...	44
Charleville ...	116,600	123,036	6,436	...	491,808	483,098	...	8,710
Childers ...	3,432	1,946	...	1,486	90	41	...	49
Cleveland ...	1,811	1,850	39	...	104	117	13	...
Condamine ...	29,038	22,820	...	6,218	18,095	9,155	...	8,940
Crow's Nest ...	12,747	16,641	3,894	...	26,666	201	...	26,465
Cunnamulla ...	87,929	86,260	...	1,669	1,351,497	1,338,803	...	12,694
Dalby ...	52,248	45,214	...	7,034	436,163	420,169	...	15,994
Diamantina (one-half) ...	47,190	49,164	1,974	...	2,735	1,187	...	1,548
Dugandan ...	20,338	20,966	628	...	479	359	...	120
Eidsvold ...	62,898	81,704	18,806	...	15,588	14,311	...	1,277
Esk ...	68,852	64,640	...	4,212	1,191	1,094	...	97
Eulo ...	68,304	54,538	...	13,766	191,731	193,567	1,836	...
Gatton ...	21,718	21,353	...	365	872	333	...	539
Gayndah ...	171,436	140,774	...	30,662	3,821	2,632	...	1,189
Gin Gin ...	48,697	46,730	...	1,967	300	324	24	...
Goodna ...	1,806	2,286	480	...	68	50	...	18
Goondiwindi ...	31,629	31,018	...	611	266,929	269,220	2,291	...
Gympie ...	51,130	53,168	2,038	...	2,599	2,545	...	54
Harrisville ...	18,694	19,958	1,264	...	928	568	...	360
Highfields ...	7,169	7,704	535	...	686	299	...	387
Hungerford ...	1,628	1,430	...	198	273,118	224,415	...	48,703
Inglewood ...	16,269	16,652	383	...	55,519	64,658	9,139	...
Ipswich ...	17,284	16,103	...	1,181	369	488	119	...
Killarney ...	3,657	4,476	819	...	197	128	...	69
Laidley ...	14,534	13,143	...	1,391	249	303	54	...
Logan ...	11,240	10,228	...	1,012	47	124	77	...
Marburg ...	5,481	6,529	1,048	...	67	35	...	32
Maroochie ...	6,701	6,933	232	...	65	20	...	45
Maryborough ...	25,333	20,076	...	5,257	194	162	...	32
Mitchell ...	143,033	132,824	...	10,209	132,226	170,833	38,607	...
Nanango ...	87,213	89,298	2,085	...	13,134	7,385	...	5,749
Nerang ...	8,781	9,889	1,108	...	74	63	...	11
Redcliffe ...	9,704	10,202	498	...	6	...	...	6
Roma ...	106,152	97,554	...	8,598	275,230	220,084	...	55,146
Rosewood ...	13,650	14,326	676	...	132	258	126	...
St. George ...	102,579	98,106	...	4,473	1,720,309	1,484,193	...	236,116
South Brisbane ...	9,271	8,823	...	448	2,279	1,338	...	941
Stanthorpe { Texas ...	21,188 { }	8,698 { }	5,337 { }	...	68,819 { }	57,716 { }	...	10,834
Surat ...	40,162	37,523	...	2,639	273,613	268,015	...	5,598
Tambo ...	30,880	31,368	488	...	563,566	598,444	34,878	...
Taroom ...	147,327	155,698	8,371	...	19,833	18,500	...	1,333
Tenningering ...	20,041	19,408	...	633	574	533	...	41
Thargomindah ...	385,601	315,635	...	69,966	600,360	391,484	...	208,876
Tiaro ...	43,615	41,581	...	2,084	278	226	...	52
Toowoomba ...	55,128	53,315	...	1,813	693,088	743,201	50,113	...
Warwick ...	37,362	38,616	1,254	...	141,205	135,715	...	5,490
Windorah (one-half) ...	136,184	129,741	...	6,443	239,241	179,780	...	59,461
Woodford ...	18,512	18,971	459	...	50	50	...	...
Yeulba ...	16,687	16,997	310	...	175	188	13	...
	2,678,019	2,565,491	79,122	191,650	9,029,846	8,452,572	170,620	747,894

Net decrease in Cattle in the Division, 112,528.

Net decrease in Sheep in the Division, 577,274.

* Called Paradise in 1895.

Table No. III.

RETURN of the NUMBER of CATTLE and SHEEP in the various PETTY SESSIONS DISTRICTS comprised in the CENTRAL DIVISION of the Colony for the Years 1895 and 1896, together with the INCREASE or DECREASE in the latter Year.

Petty Sessions Districts.	Cattle.				Sheep.			
	1895.	1896.	Increase.	Decrease.	1895.	1896.	Increase.	Decrease.
Alpha	104,725	118,514	13,789	...	369	3,316	2,947	...
Aramac	25,071	26,663	1,592	...	346,826	298,562	...	48,264
Banana	115,825	112,252	...	3,573	11,883	11,123	...	760
Barcaldine	8,714	15,106	6,392	...	979,054	1,070,660	91,606	...
Blackall	13,012	6,378	...	6,634	986,364	952,642	...	3,722
Boulia	163,790	254,895	91,105	...	87,610	106,489	18,879	...
Clermont	162,175	176,871	14,696	...	619,678	640,966	21,288	...
Diamantina (one-half)	47,191	49,165	1,974	...	2,735	1,188	...	1,547
Emerald	70,359	50,233	...	20,126	1,165	115	...	1,050
Gladstone	128,371	113,343	...	15,028	2,230	6,481	4,251	...
Isisford	18,352	22,231	3,879	...	877,905	841,318	...	36,587
Longreach	42,358	43,840	1,482	...	1,529,498	2,005,686	476,188	...
Muttaburra	71,725	60,831	...	10,894	2,011,051	1,694,104	...	316,947
Mackay (Nebo collection, say six elevenths)	106,279	100,013	...	6,266	1,279	1,325	46	...
Mount Morgan	273,121	{ 2,682 } { 34,973 }	...	17,632	{ 2 } { 3,652 }	...	13,978	
Rockhampton	235,466	...	...	...	...	...	...
St. Lawrence	150,882	141,271	...	9,611	8,485	1,023	...	7,462
Springsure	176,567	186,662	10,095	...	325,072	283,571	...	41,501
Windorah (one-half)	136,185	129,741	...	6,444	239,241	179,781	...	59,460
Winton	131,650	145,612	13,962	...	1,168,984	1,302,822	133,838	...
	1,946,352	1,991,769	158,966	113,549	9,217,061	9,434,826	749,043	531,278

Net increase in Cattle in the Division, 45,417.

Net increase in Sheep in the Division, 217,765.

Table No. IV.

RETURN of the NUMBER of CATTLE and SHEEP in the various PETTY SESSIONS DISTRICTS comprising the NORTHERN DIVISION of the Colony for the Years 1895 and 1896, together with the INCREASE or DECREASE in the latter Year.

Petty Sessions Districts.	Cattle.				Sheep.			
	1895.	1896.	Increase.	Decrease.	1895.	1896.	Increase.	Decrease.
Ayr	49,827	22,541	...	27,286	40	1,035	995	...
Bowen	253,640	201,619	...	52,021	420	223	...	197
Burke	165,065	163,082	...	1,983	1	41	40	...
Cairns	8,381	1,729	...	6,652	...	156	156	...
Camooweal	25,076	24,722	...	354	26,000	21,053	...	4,947
Cape River	108,284	129,478	21,194	...	903	243	...	660
Cardwell	14,433	4,029	...	10,404	...	...	...
Charters Towers	252,036	143,505	...	108,531	375	227	...	148
Cloncurry	275,297	296,105	20,808	...	388,628	353,920	...	34,708
Cook	56,395	18,515	...	37,880	4	...	4	...
Croydon	32,660	19,619	...	13,041	503	2	...	501
Douglas	2,782	1,168	...	1,614	...	...	...
Etheridge	143,886	147,059	3,173	...	6	...	...	6
Herberton	63,511	57,820	...	5,691	128	549	421	...
Hughenden	286,660	297,859	11,199	...	1,162,254	1,304,368	142,114	...
Ingham	55,020	18,535	...	36,485	123	140	17	...
Mackay (less Nebo collection, say five elevenths)	88,567	83,345	...	5,222	1,067	1,104	37	...
Mareeba	4,094	2,452	...	1,642	...	...	...
Mourilyan	885	764	...	121	...	...	...
Norman	191,638	230,988	39,350	...	29,372	23,104	...	6,268
Palmer	20,248	21,035	787	...	...	...	...
Ravenswood	28,930	25,095	...	3,835	4	11	7	...
Somerset	327	1,132	805	...	6	15	9	...
Thornborough	46,414	31,977	...	14,437	...	...	...
Townsville	23,974	5,944	...	18,030	218	107	...	111
	2,198,030	1,950,117	97,316	345,229	1,610,052	1,706,298	143,796	47,550

Net decrease in Cattle in the Division, 247,913.

Net increase in Sheep in the Division, 96,246.

LIVE STOCK SLAUGHTERED.

Table No. V.

RETURN of LIVE STOCK SLAUGHTERED for PRESERVATION as Food, or FREEZING or for TALLOW, during the YEARS 1887-1896, with the Quantity of MEAT, TALLOW, LARD, &c., produced.

Year.	Number of Establishments.	Average Number of Hands employed.	NUMBER SLAUGHTERED.						MEAT PRESERVED OR FROZEN.						Extract and Essence of Meat Produced.	Quantity of Tallow Produced.	Quantity of Lard Produced.	
			Cattle.			Sheep.			Hogs.			Beef.		Mutton.				
			For Preserving.	For Freezing.	For Boiling Down.	For Preserving.	For Freezing.	For Boiling Down.	Preserved.	Frozen.	Preserved.	lb.	lb.	lb.	lb.	lb.	lb.	
1887	4	...	15,578			23,448			...		5,174,000					47,203	1,267	
1888	5	...	12,315			14,613			...		3,995,000					71,132	1,109	
1889	4	...	11,266			85,988			350		7,403,046					120,199	1,170	
1890	6	...	16,831			141,763			4,446		10,636,039					111,838	2,073	
1891	8	286	21,919	8,784	...	29,111	122,022	...	17,790		16,194,329*					135,128	2,632	
1892	16	989	28,683	24,567	32,000	170,683	162,662	317,421	†19,329	3,008,090	17,862,694	1,751,909	5,650,907	1,149,778	148,135	6,639		
1893	25	1,129	43,543	39,828	41,166	150,668	66,025	1,070,082	‡56,145	7,751,031	28,137,501	1,726,541	2,851,255	3,971,018	228,264	11,183		
1894	31	1,127	77,916	48,558	67,611	394,405	57,787	417,328	‡48,539	§17,640,457	33,305,023	5,862,373	2,749,042	4,695,280	168,805	15,683		
1895	39	2,848	104,969	80,487	98,374	385,060	75,600	743,257	‡58,870	†9,849,396	50,349,956	5,088,502	3,064,458	¶4,941,512	511,533	21,263		
1896	Metropolitan	4																
	Barcaldine	1																
	Bowen	3																
	Cardwell	1																
	Charleville	2																
	Charters Towers	1																
	Emerald	1																
	Esk	2																
	Gladstone	1																
	Gatton	1																
	Hughenden	1																
	Laidley	2																
	Longreach	1																
	Mackay	2																
	Marburg	1																
	Norman	1																
	Rockhampton	1																
	Roma	1																
	St. Lawrence	2																
	Toowoomba	3																
	Townsville	2																
	Yeulba	1																
		35	2,838	77,719	76,483	87,562	262,151	100,550	430,696	‡67,034	†9,197,234	50,245,213	2,914,902	4,571,086	55,108,726	517,011	12,736	203,972

* Of this 4,255,733 lb. were preserved, and 11,938,596 lb. frozen.

§ Includes 682,955 lb. salted.

a. Includes 182,586 salted.

† Number of pigs killed by farmers for bacon not collected.

|| Includes 326,232 lb. salted.

¶ Exclusive of 925,025 lb. pork (fresh and salt), made by farmers, in addition to their bacon.

b. Exclusive of 1,220,034 lb. pork (fresh and salt) made by farmers, in addition to their bacon.

Table No. VI.
OTHER PRODUCTS OF MEAT PRESERVING, &c., ESTABLISHMENTS.

District.	No.	Manure.		Edible Fats.		Hides.		Skins.		Bones.		Horns and Hoofs.		Hair.		Oils, &c.		Total Value.
		Tons.	£	lb.	£	Number.	£	Number.	£	Tons.	£	£	b.	£	Gallons.	£	£	
1895	36	4,505	11,124	560,219	6,599	230,781	161,795	1,170,559	180,545	1,332	5,001	3,905	59,434	1,979	28,454	2,661	353,609	
Metropolitan ...																		
Barcaldine ...																		
Bowen ...																		
Cardwell ...																		
Charleville ...																		
Charters Towers ...																		
Emerald ...																		
Esk ...																		
Gladstone ...																		
Gatton ...																		
Hughenden ...																		
Laidley ...																		
Longreach ...																		
Mackay ...																		
Marburg ...																		
Norman ...																		
Rockhampton ...																		
Roma ...																		
St. Lawrence ...																		
Toowoomba ...																		
Townsville ...																		
Yeulba ...																		

Table No. VII.

RETURN showing the NUMBER of CATTLE, SHEEP, &c., SLAUGHTERED for CONSUMPTION for Food in SOME of the PRINCIPAL CITIES of QUEENSLAND, together with the AVERAGE DEAD WEIGHT of each ANIMAL and the ESTIMATED QUANTITY CONSUMED per CAPITA, for 1896.

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CITY (including SUBURBS).	POPULATION.	NUMBER SLAUGHTERED.					AVERAGE DEAD WEIGHT.					LB. CONSUMED PER CAPITA.					
		Estimated for 1896.	Cattle.	Sheep.	Calves.	Lambs.	Pigs.	Cattle.	Sheep.	Calves.	Lambs.	Pigs.	Beef.	Mutton.	Veal.	Lamb.	Total.
Bowen	1,413	988	350	80	20	85	700	40	160	30	96	489	10	9	0½	6	514½
Brisbane	100,913	34,706	181,256	8,725	4,738	7,891	660	43	41	32	77	227	77	3	1½	6	314½
Bundaberg	8,250	5,536	10,290	543	200	915	625	50	75	30	80	420	62	5	1	9	497
Cairns	2,000	1,290	1,410	...	...	228	563	41	...	...	65	363	29	..	...	7	399
Charters Towers	24,000	12,565	52,478	790	1,232	2,836	646	44	180	30	90	338	96	6	1½	10½	452
Cooktown†	2,000	2,743	51	577	11	364	600	47	120	20	50	823	1	35	...	9	868
Gladstone	1,000	605	840	6	10	112	700	45	100	25	80	423½	38	0½	...	9	471
Gympie	12,000	4,256	9,196	565	253	762	650	44	57	31	73	230½	34	3	1	5	273½
Ipswich	*13,059	5,569	15,947	261	228	847	714	46	80	35	87	304	56	1½	0½	5½	367½
Mackay	5,300	3,622	4,384	321	91	348	520	40	100	25	80	355	33	6	0½	5	399½
Maryborough	11,724	5,981	10,535	672	184	776	750	50	45	35	100	383	45	3	0½	6½	438
Normanton† ... ... ... ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rockhampton	20,000	8,027	37,911	555	655	1,725	585	44	117	25	68	240	83	3	1	6	333
Roma	*1,857	1,310	3,857	9	65	199	672	56	50	22	96	474	116	..	1	10	601
Toowoomba	*10,936	4,761	16,840	47	600	400	600	45	80	30	100	261	69	..	2	4	336
Townsville	*10,356	6,317	26,505	437	884	1,012	660	40	80	25	90	403	102	3	2	9	519
Warwick	4,000	1,320	4,000	30	30	50	600	45	80	30	100	198	45	0½	..	1	244½
	228,808	99,596	375,850	13,618	9,201	18,550	648	43	62	30	86	282	71	4	1	7	365

* Census population of 1891

† The Inspector reports that the relatively high figures given for Cooktown is caused by the quantity of meat purchased by miners and others for consumption elsewhere.

‡ Return imperfect.

Table No. VIII.

RETURN showing the TOTAL EXTENT of LAND under CULTIVATION, and the AREA under each DESCRIPTION of CROP, in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland, during the Year 1890.

Table No. VIII.—*continued.*

RETURN showing the TOTAL EXTENT of LAND under CULTIVATION, and the AREA under each DESCRIPTION of CROP, in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland, during the Year 1896—continued.

Table No. VIII.—continued.

RETURN showing the TOTAL EXTENT of LAND under CULTIVATION, and the AREA under each DESCRIPTION of CROP, in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland, during the Year 1896—continued.

Petty Sessions Districts.	Total Extent of Land under permanent Pasture with Artificially Sown Grasses.										Total Extent of Land under Cultivation.										Land in Fallow.																				
	WHEAT.					OATS.					BARLEY.					MAIZE.					POTATOES.					SUGAR-CANE.					SOWN GRASSES.										
	Acres.	Acres.	Acres.	Acres.	Grain.	Acres.	Acres.	Acres.	Grain.	Acres.	Acres.	Acres.	Acres.	Grain.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.															
NORTHERN. East of Coast Range.																																									
Ayr	7,295	958	6,337	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bowen	1,431	308	1,123	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cairns	815	6,932	17	6,915	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cardwell	82	...	82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cook	20	672	50	622	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Douglas	357	1,952	35	1,917	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ingham	22	8,213	711	7,502	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mackay (less Nebbo collection)	50	24,365	2,600	21,765	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mareeba	29	105	15	90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mowbray	...	6,865	181	6,684	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Somerset	905	...	1	904	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Townsville	305	16	289	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total East	1,293	59,122	4,892	54,230	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
West of Coast Range.																																									
Burke	9	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Camooweal	33	5	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cape River	138	16	122	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Charters Towers	28	...	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Clonecurry	182	17	165	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croydon	402	12	390	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Etheridge	834	2,646	125	2,521	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Herberton	96	...	96	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hughenden	17	...	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Norman	115	...	115	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palmer	67	30	37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ravenswood	164	8	156	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total West	834	3,897	213	3,684	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total N. Div.	2,127	63,019	5,105	57,914	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grand Total 1896	11,960	336,775	14,097	322,678	35,831	1,845	1266	1881	11,565	2,802	1122	282	1236	115,715	1,423	345	427	223	600	7,672	3,181	280	83,093	1,069	309	994	133,3,318	17,892	4,630	3,673	825	80	2657	1842	178	4,477	823	1791	3875	3,308	
" 1895	10,548	299,278	13,859	285,319	27,090	1,344	1216	922	9,763	2,830	721	221	1397	100,481	1,862	202	410	196	716	9,240	2,736	494	77,247	1,245	194	1,061	60	2,215	14,315	4,498	2,411	463	145	3630	1782	239	3,916	847	1900	4121	3,189
Increase in 1896	1,412	37,497	138	37,359	8,741	501	50	959	1,802	...	401	61	...	15,234	...	143	17	27	...	395	...	5,846	...	115	...	78	1,133	3,577	132	1,262	362	60	...	561	...	24	109	246	119		
Decrease in 1896	28	...	161	...	439	...	116	1,568	...	214	...	176	...	67	65	...	943	...	61	...	24	109	246	119				

Table No. IX.

RETURN showing the GROSS PRODUCE of PRINCIPAL CROPS raised in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland during the Year ended 31st December, 1896.

Table No. IX.—*continued.*

RETURN showing the GROSS PRODUCE of PRINCIPAL CROPS raised in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland during the Year ended 31st December, 1896—*continued.*

PETTY SESSIONS DISTRICTS.	QUANTITY OF PRODUCE.																													
	GRAIN CROPS.							POTATOES.			Cotton.	SUGAR-CANE.		Arrowroot.	Tobacco (cured leaf).	Coffee.	HAY.							VINES.	Bananas.	Pineapples.	Oranges.			
	Wheat.	Oats.	Barley.	Maize.	Rye.	Rice.	English.	Sweet.	Sugar-Cane Crushed.	Sugar.		Wheat.	Oats.				Barley.	Rye.	Lucerne	Panicum.	Other Sown Grasses.									
	Bushels.	Bushels.	Bushels.	Bushels.	Bhls.	Bushels.	Tons.	Tons.	Lb.	Acres.	Tons.	Lb.	Cwt.	Lbs.			Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.							
SOUTHERN. <i>West of Main Range—continued.</i>																														
Roma ...	8,689	26	40	1,410	...	...	3	4	...	...	...	...	...	...	...	235	30	12	...	...	4	...	...	1,411,560	...	1,000	102,343	4,000	
St. George ...	...	...	...	461	...	...	8	1	...	...	...	...	...	...	...	39	21	...	...	4	...	...	...	...	11,180	...	...	...
Stanhope ...	1,260	1,393	32	2,283	...	...	211	...	...	...	...	...	...	...	...	635	...	15	242	...	7	15	...	...	32,130	...	...	...
Surat ...	...	...	...	190	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,360	...	...	...
Tambo ...	...	...	...	...	...	...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7,000	...	...	...
Texas ...	1,542	...	...	900	...	...	9	...	...	...	...	...	...	...	...	3,909	...	3	53	...	...	34	...	...	2,240	...	...	200	
Thargomindah ...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9,300	...	300	...	
Toowoomba ...	147,171	14,225	3,848	260,613	656	...	738	15	...	...	...	...	...	...	...	40	...	293	2,068	32	5	4,704	283	23	836,823	...	2,130	...	
Warwick ...	151,998	2,923	3,824	263,354	384	...	1,041	17	...	...	...	...	...	...	...	294	...	182	489	3	4	3,240	10	...	494,165	...	...	39,370	
Windorah, part of	...	...	...	5,826	...	...	52	34	...	...	...	...	...	...	...	...	...	...	28	6	...	...	...	61	2	13,660	...	1,110	...
Yeulba ...	3,012	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total West ...	580,166	29,957	17,777	1,115,632	4,555	1	5,016	139	...	...	...	...	...	...	...	8,551	...	1,091	4,340	166	19	14,213	732	25	3,275,531	600	1,000	170,533	
Total S. Div. ...	601,159	32,161	19,317	2,862,877	7,249	417	17,203	0,727	141,002	32,978	53,048	696,918	8,608	1,300	1,673	16,115	500	714	40,854	6,841	73	4,935,104	1,616,282	263,989	796,550	...				
CENTRAL. <i>East of Main Range.</i>																														
Banana ...	...	...	...	...	...	...	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Clermont ...	6	...	...	...	...	...	702	...	...	11	28	...	...	...	...	...	...	2	...	...	...	...	...	...	...	1,800	...	...	...
Emerald ...	...	...	...	...	...	...	317	...	...	16	12	...	...	...	...	...	...	1	...	...	...	...	...	...	...	13,830	...	3,562	...
Gladstone ...	...	...	...	...	...	...	7,165	...	...	53	46	...	...	...	...	...	7	...	...	...	193	5	...	...	3,270	2,930	950	6,164	
Mackay (Nebo collection) ...	...	...	...	...	...	...	100	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2,520	...	1,420	...
Mount Morgan ...	...	...	...	152	...	...	29	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1,856	...	250	...
Rockhampton ...	10	...	...	15	7,139	...	134	377	...	690	1,550	...	...	...	Nil	...	1,347	...	3	653	167	39	64,530	14,922	3,477	55,370	80		
St. Lawrence ...	...	...	...	...	945	...	14	25	...	...	...	...	...	...	5	...	...	5	...	5	...	...	4,900	...	240	1,550	...		
Springsure ...	65	...	...	...	394	...	5	10	...	...	...	...	...	...	6	...	...	1	...	...	...	...	...	...	...	6,360	...	...	...
Total East ...	81	...	15	16,944	...	233	528	...	690	1,550	...	5	Nil	6	1,364	...	3	852	174	39	99,066	18,092	4,757	69,454	...					
West of Main Range.																														
Alpha ...	...	...	...	...	...	...	4	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,980	...	...	...
Aramac ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Barcaldine ...	14	...	...	...	...	...	80	...	...	1	...	...	...	...	...	...	...	57	...	...	...	...	...	...	...	448	...	...	...
Blackall ...	...	...	...	...	...	...	300	...	...	22	...	...	...	...	...	...	...	10	10	1	...	...	...	...	...	21,840	...	720	...
Boulia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diamantina, part of	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Isisford ...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Longreach ...	...	...	...	...	...	...	4	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,200	...	20	...
Muttaburra	3	2,240	...	200	...
Windorah, part of	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,686	...	4,032	...
Winton	26	3	110
Total West ...	1'	...	...	...	...	...	69	13	...	...	...	...	...	...	...	...	...	10	67	1	...	...	...	...	...	38,426	...	...	1,050
Total Central Division	95	...	...	...	...	...	302	541	...	690	1,550	...	5	Nil	16	1,431	1	3	852	174	39	137,492	18,092	4,757	70,504	...	...	...

Table No. IX.—continued.

RETURN showing the GROSS PRODUCE of PRINCIPAL CROPS raised in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland during the Year ended 31st December, 1896—continued.

PETTY SESSIONS DISTRICTS.	QUANTITY OF PRODUCE.																											
	GRAIN CROPS.							POTATOES			SUGAR-CANE.			HAY.							VINES.		FRUIT.					
	Wheat.	Oats.	Barley.	Maize.	Rye.	Rice.	Cotton.	Sugar-Cane Crushed.	Sugar.	Arrowroot.	Tobacco (cured leaf).	Coffee.	Wheat.	Oats.	Barley.	Rye.	Lucerne	Panicum.	Other Sown Grasses.	Grapes Gathered.	Bananas.	Pineapples.	Oranges.					
	Bushels.	Bushels.	Bushels.	Bushels.	Bshls.	Bushels.	Tons.	Tons.	Lb.	Acres.	Tons.	Lb.	Cwt.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Lb.	Dozens.	Dozens.	Dozens.				
NORTHERN. <i>East of Coast Range.</i>																												
Ayr	2,486	...	20	276	...	4,515	6,146	...	...	...	...	...	...	...	15	...	65,300	910	78,798			
Bowen	3,870	...	97	46	...	...	...	...	...	...	...	...	...	...	...	...	8,172,900	13,670	107,430			
Cairns	56,058	...	14,385	48	669	30	1,857	2,932	...	7,795	...	6	...	...	...	...	5,000	4,000	910	72,300		
Cardwell	16	...	...	...	...	...	100	...	...	...	...	...	...	75,370	4,210	35,085			
Cook	8	6,417	...	2,744	36	349	...	...	...	25	5	512	...	8	...	...	...	...	52,546	6,726	50,090		
Douglas	6,977	...	1,525	...	22	...	...	...	...	Nil	...	...	...	...	...	...	...	2,800	...	100		
Ingham	2,995	...	...	30	269	...	6,005	11,938	...	...	...	2	...	...	...	...	...	7,620	186,750	754	5,310	
Mackay (less Nebo collection)	20	4,781	...	314	117	460	...	16,428	16,515	...	4	100	300	140	...
Mareeba	2,927	...	13	7	...	...	...	...	...	Nil	...	...	...	...	...	...	...	6,745,980	2,750	7,000		
Mourilyan	1,185	190	...	17	100	...	4,167	8,645	...	...	...	...	...	...	...	...	...	...	14,304	401	195	
Somerset	50	...	30	...	57	...	...	...	...	...	...	...	...	...	...	...	...	2,400	17,020	4,230	77,750	
Townsville	1,060	146	26	4
Total East	...	20	8	88,806	190	18,998	524	2,297	30	32,972	46,176	25	13	8,407	...	116	...	...	...	...	2	17	15,020	15,337,270	34,701	434,058	
West of Coast Range.																												
Burke	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,400	10	...	
Camooweal	5	16	...	...	...	...	...	...	6	...	...	...	...	...	...	...	12,500	30	8,250	
Cape River	10	...	...	10	46	...	...	...	...	...	...	...	...	...	...	...	...	7	15,545	500	5,195	
Charters Towers	10	4	...	...	...	...	...	...	...	...	...	...	...	...	...	1,580	80	320	
Cloncurry	407	10	15	116	33	150	17,880	2,827	4,300
Croydon	2,582	...	1,068	198	471	...	...	...	3	...	...	...	123	...	93	...	...	...	5,580	...	950	
Etheridge	85,527	...	1,068	198	471	...	...	3,360	...	...	...	...	...	...	...	...	...	3,300	52,900	1,600	19,270	
Herberton	1,618	...	10	13	...	...	...	...	...	...	4	...	...	...	...	...	...	390	...	1,860		
Hughenden	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200	...	
Norman	3,652	14	36	2,740	135	3,064
Palmer	30	...	...	4	25	...	...	...	...	...	...	...	...	...	...	...	...	...	1,450	5	736	
Ravenswood	2,500	...	30	13	53	...	...	...	...	...	...	41	...	...	...	...	...	...	6,400	576	220	
Thornborough	96,326	10	1,113	422	757	...	...	2,360	3	...	174	...	...	93	...	7	34,915	87,480	10,378	47,878		
Total West
Total N. Div.	...	20	8	185,132	200	20,111	946	3,054	30	32,972	46,176	3,385	16	8,407	...	290	...	...	93	2	24	49,935	15,424,750	45,079	481,936		
Grand Total, 1896	601,254	32,181	19,340	3,065,333	7,449	20,523	18,451	14,322	141,032	66,640	100,774	700,303	8,629	9,707	1,689	17,836	501	717	41,799	7,017	136	5,122,531	17,059,124	313,835	1,348,990			
" " 1895	123,630	10,887	7,756	2,391,378	4,169	19,245	19,027	14,233	269,110	55,771	346,853	7,511	14,060	1,428	12,498	372	945	30,835	4,662	226	4,254,795	14,860,386	376,875	1,995,872				
Increases in 1896	477,624	21,294	11,584	673,955	3,280	1,283	...	89	...	10,869	14,519	353,450	1,118	...	261	5,338	129	228	10,964	2,555	...	90	867,736	2,198,738	...	63,040		
Decreases in 1896	576	...	128,078	...	...	...	4,353	...	...	...	...	...	...	...	...	...	...	...	...	646,882	

AGRICULTURE.

Table No. X.

SHOWING the TOTAL EXTENT of LAND under CULTIVATION, and the AREA under each DESCRIPTION of CROP—RETURN for TEN YEARS.

* These can no longer be kept separate.

Table No. XI.

SHOWING the GROSS PRODUCE of PRINCIPAL CROPS raised in the Colony of Queensland—RETURN for TEN YEARS.

* Also 497 tons rye hay.

† Not specially returned in previous years.

[‡] Unginned.

§ Also 867 tons rye hay.

|| Also 617 tons rye hay.

¶ Also 944 tons rye hay.

** Also 717 tons were han-

AVERAGE PRODUCE PER ACRE OF PRINCIPAL CROPS—RETURN FOR TEN YEARS.

Table No. XII.

Year.	Wheat	Oats	Barley	Maize	Rye	Rice.	English	Sweet Potatoes,	Cotton.	Sugar (on Acres	SOWN GRASSES.										Grapes	Bananas.	Pine-	Oranges.	
	Grain.	Grain.	Grain.		Grain.		Potatoes.			Crushed).	Arrowroot.	Tobacco	(Dried	Coffee.	Wheat	Oats	Barley	Rye	(Hay).	Panicum	Other	Wine.	for		Apples.
1887 ...	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Lb.	Tons.	Lb.	Cwt.	Lb.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Gallons.	Lb.	Dozens.	Dozens.		
	22·10	24·26	27·03	22·31	...	50·36	2·37	7·11	...	1·65	1,242·44	3·31	...	1·83	1·81	3·80	...	2·19	1·71	1·26	194·23	2,712·75	3,060·87	368·07	778·61
1888 ...	0·89	5·65	22·94	25·38	...	37·41	1·90	5·39	...	1·07	1,710·54	11·53	...	1·36	1·03	0·55	...	1·73	1·69	1·80	240·40	2,206·53	2,847·23	323·14	695·15
1889 ...	15·88	19·41	21·24	17·84	...	8·81	2·38	5·64	*7·00	1·36	2,780·90	9·52	...	1·96	2·29	3·11	...	1·71	1·88	1·76	251·34	2,487·57	1,521·49	362·71	323·74
1890 ...	20·02	21·82	21·70	23·88	15·81	22·55	2·09	5·76	*322·19	1·69	2,580·23	4·43	...	1·64	1·60	1·60	...	1·61	1·73	1·44	274·31	2,547·73	5,656·06	365·26	740·49
1891 ...	20·32	23·31	28·83	30·30	23·11	46·96	2·73	5·58	*541·62	1·39	2,878·70	9·75	...	1·65	1·85	3·00	...	1·96	2·07	2·00	247·47	2,562·95	2,988·14	477·52	766·55
1892 ...	14·57	21·94	18·10	25·32	22·23	29·99	2·41	5·45	*296·19	1·51	2,597·92	11·97	...	1·53	1·86	1·74	1·87	2·35	1·99	1·62	225·32	2,576·24	4,667·43	641·36	979·97
1893 ...	14·25	19·96	16·96	19·50	19·11	40·61	2·07	4·22	*153·68	1·74	2,337·17	9·64	...	1·17	1·79	1·92	1·59	2·22	1·67	2·38	157·41	2,135·23	4,371·15	428·11	1,633·87
1894 ...	18·80	20·62	26·67	25·90	18·55	38·26	2·68	5·12	+548·01	1·84	1,896·05	10·46	...	1·37	1·85	1·72	1·93	2·47	1·76	1·44	291·73	2,976·06	2,903·42	837·77	1,225·43
																					‡ Grapes.				
																					Lb,				
1895 ...	4·56	11·81	10·76	23·80	20·64	26·88	2·06	5·20	+544·76	1·55	1,787·90	7·08	234·33	1·06	1·28	1·68	2·30	2·15	1·93	1·56	2,387·65	3,794·79	444·95	1,050·46	
1896 ...	16·78	17·10	17·24	26·49	21·59	34·21	2·40	4·57	+503·69	1·51	2,266·35	8·68	70·34	0·92	1·54	1·78	1·68	2·34	1·91	1·70	2,780·96	3,810·39	381·33	753·20	

4 Ginned.

† Unsigned.

[†] The manufacture of wine by the purchasers of the grapes and not the growers has now attained such proportions that the returns can no longer be kept distinct.

WHEAT RETURNS—1896.

Table No. XIII.

RETURN for the Year 1896, showing the EXTENT of LAND SOWN with WHEAT GRAIN in the several PETTY SESSIONS DISTRICTS from which Returns have been received, the AREA MOWN for HAY, REAPED for GRAIN, CUT for GREEN FEED for CATTLE, and UNPRODUCTIVE, respectively; also the AREA affected with RUST, free from RUST, and the PRODUCE.

PETTY SESSIONS DISTRICTS.	Total Extent of Land Sown with Wheat Grain.	Total Area Mown for Hay.	Total Area Reaped for Grain.	Total Area Cut for Green Food for Cattle.	Total Area Unproductive.	RESULTS.												
						AFFECTED WITH RUST.						FREE FROM RUST.						
						Total Area affected with Rust.	HAY.		GRAIN.		Total Area free from Rust.	HAY.		GRAIN.		Acres.	Produce.	
							Acres.	Produce.	Acres.	Produce.		Acres.	Produce.	Acres.	Produce.		Average per Acre.	
SOUTH.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Tons.	Bushels.	Bushels.	Acres.	Tons.	Bushels.	Bushels.	Acres.	Bushels.	Bushels.		
<i>East of Main Range.</i>																		
Biggenden	5	3	1	1	...	...	...	...	...	4	3	4	1	16	16'00		
Brisbane	3	3	...	...	...	...	...	...	...	3	3	6	...	...	...
Caboolture	6	...	...	6	...	...	...	...	...	...	...	...	...	...	...
Crow's Nest	192	21	143	27	1	...	...	...	...	164	21	31	143	2,687	18'79		
Dugandan	43	9	28	6	...	...	...	...	...	37	9	12	28	903	32'25		
Eidsvold	11	10	...	1	...	...	...	...	...	10	10	14	...	...	...
Esk	5	2	3	...	...	...	...	...	...	2	...	2	44	22'00			
Gatton	517	60	416	41	...	4	...	4	19	4'75	472	60	140	412	10,120	24'56		
Gayndah	3	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Gin Gin	2	2	...	...	...	...	...	...	...	2	...	2	20	10'00			
Harrisville	81	46	26	9	...	9	9	14	...	63	37	59	26	496	19'08			
Ipswich	11	4	1	1	5	...	...	...	...	5	4	3	1	30	30'00		
Laidley	318	139	167	11	1	...	...	...	...	306	139	239	167	3,856	23'09		
Logan	3	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...
Marburg	32	3	29	...	...	...	...	...	...	3	...	3	50	16'67			
Nanango	151	14	136	1	...	...	...	...	...	150	14	12	136	2,534	18'63		
Nerang	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Redcliffe	10	9	1	...	...	...	...	...	...	9	9	14	...	...	...	...
Rosewood	59	20	5	34	...	...	...	...	...	25	20	24	5	78	15'60		
South Brisbane	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Taroom	8	8	...	7	1	...	...	...	...	8	8	10	...	...	...	...
Tiaro	8	...	7	1	...	...	...	...	...	7	...	7	140	20'00			
Woodford	8	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	...	1,481	346	937	188	10	13	9	14	4	19	4'75	1,270	337	568	933	20,974	22'48

SOUTH.

West of Main Range.

Allora	8,858	185	8,350	270	53	8,535	185	133	8,350	156,024	18·69	
Charleville	2	2	20	20	17	
Cunnamulla	20	20	5	83	4	4	24	6·00	932	32	45	900	16,867	18·74
Dalby	1,024	32	904	5	83	4	28	28	6	
Goondiwindi	28	28	1,661	55	55	1,606	29,910	18·62	
Highfields	1,712	64	1,606	4	38	9	9	2	89	31	16	58	841	14·50	
Inglewood	...	...	94	34	60	...	...	5	3	2	2	24	12·00	2,406	...	...	2,406	58,025	24·12
Killarney	...	...	2,486	...	2,437	4	45	31	...	...	31	212	6·84	920	22	20	898	4,567	5·09
Mitchell	1,470	22	898	412	138	
Roma	...	...	2,274	500	1,621	52	101	200	...	...	200	600	3·00	1,921	500	235	1,421	8,089	5·69
St. George	58	43	...	8	7	43	43	39	
Stanthorpe	...	...	108	12	96	...	...	10	1	3	9	100	11·11	98	11	12	87	1,160	13·33
Texas	...	...	96	3	92	1	...	...	...	...	...	...	...	95	3	3	92	1,542	16·76
Toowoomba	...	...	11,318	359	10,246	223	490	187	55	50	132	1,143	8·66	10,418	304	243	10,114	146,028	14·44
Warwick	...	...	7,219	150	6,883	33	153	126	2	2	124	1,080	8·71	6,907	148	180	6,759	150,918	22·33
Yeulba	...	...	647	37	529	45	36	...	...	...	...	...	...	566	37	28	529	3,012	5·69

Total	37,414	1,489	33,722	1,058	1,145	572	70	59	502	3,183	6·34	34,639	1,419	1,032	33,220	576,983	17·37
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Total Southern	38,895	1,835	34,659	1,246	1,155	585	79	73	506	3,202	6·33	35,909	1,756	1,600	34,153	597,957	17·51
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CENTRAL.

Barcaldine	4	...	4	4	4	14	3·50
Blackall	21	5	...	16	5	5	10
Clermont	3	...	3	3	3	6	2·00
Isisford	3	3
Rockhampton	1	...	1	1	1	10	10·00
Springsure	15	5	3	7	8	5	6	3	65	21·67

Total Central	47	10	11	23	3	21	10	16	11	95	8·64
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Total Colony	38,942	1,845	34,670	1,269	1,158	585	79	73	506	3,202	6·33	35,930	1,766	1,616	34,164	598,052	17·51
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OTHER CROPS.

Consequently the Director obtained during his visit to the USSR from "Omskneftegaz" 3-4-1978-1979

OTHER FRUITS.		OTHER VEGETABLES.		OTHER MISCELLANEOUS CROPS.	
PERRY SESSIONS DISTRICT.				OTHER GRAIN.	
		Apples.	Apricots.		
South—		Acres.	Acres.	Cocoanuts.	
East of Main Range	2	1	12	Custard Apples.	
West of Main Range	63	8	10	Figs.	
Central—			67	Guavas.	
East of Main Range	1		122	Lemons.	
West of Main Range	...	...	1	Mangoes.	
Northern—			1	Melons.	
East of Main Range	...	...	14	Nectarines.	
West of Main Range	3	1	3	Olives.	
Northem—			18	Papaw.	
East of Main Range	506	1	3	Passion Fruit.	
West of Main Range	3	2	11	Peaches.	
Total Area ...	74	9	506	Pea Nuts.	
			15	Persimmons.	
			25	Pears.	
			3	Plums.	
			33	Quincees.	
			205	Strawberries.	
			145	Beans.	
			1	Cabbages.	
			2	Carrots.	
			2	Cauliflowers.	
			5	Cucumbers.	
			24	Marrows.	
			14	Onions.	
			29	Peas.	
			1	Pumpkins.	
			54	Swede Turnips.	
			7	Tomatoes.	
			27	Turnips.	
			7	Yams and Taro.	
			169	Kaffir Corn.	
			3	Cassava, Manioc, or Tapioca.	
			3	Cow Pea.	
			33	Ginger.	
			30	Mangel Wurzel.	
			1,980	Rosellas.	
			14	Rhubarb.	
			45	Chicory.	
			21	Malting Barley.	
			200		
			1		
			7		
			1		
			2		
			1		
			4		
			1		
			10		
			46		